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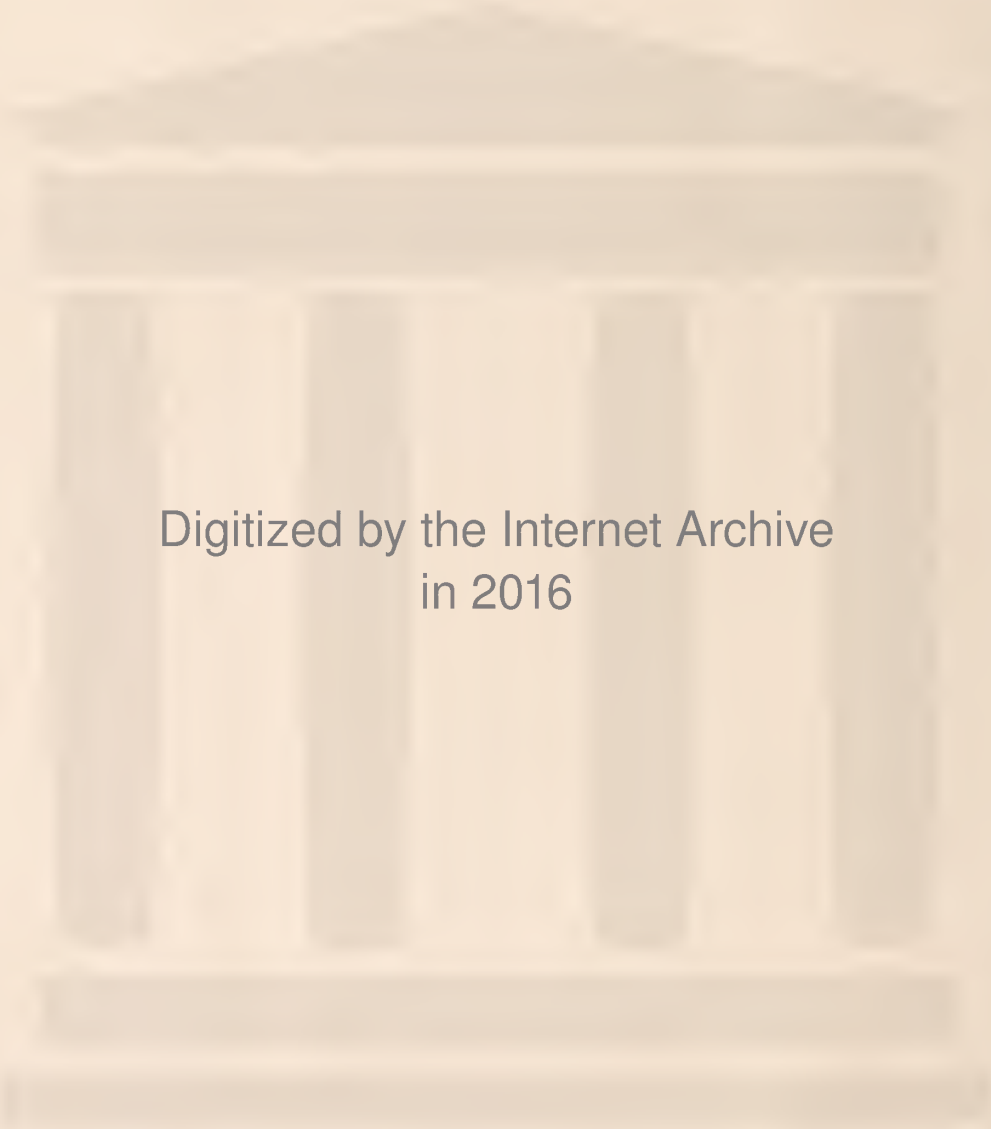
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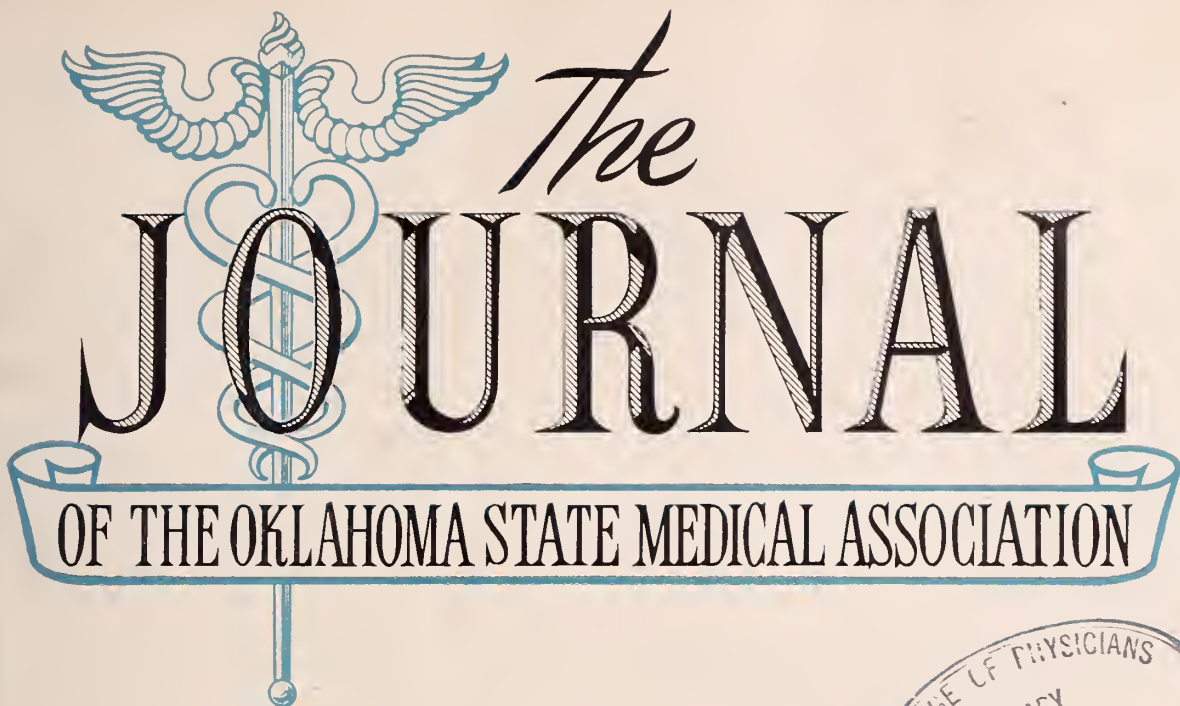
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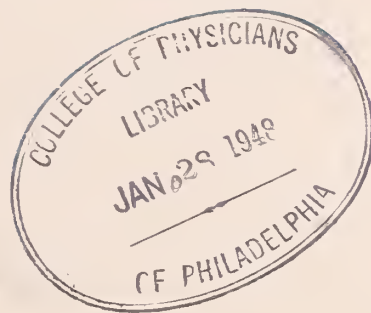
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The JOURNAL

OF THE OKLAHOMA STATE MEDICAL ASSOCIATION

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Antirabic Vaccine

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THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

PLEASE TAKE NOTICE POLITICIANS, PEOPLE, PHYSICIANS

The following from the November 15 British Medical Journal¹ speaks for itself and shows into what deep water the Laborite Socialistic government in Great Britain has gotten into with its promise of 24 hour, seven days a week medical service. In the correspondence column under the title "Working Hours in the N.H.S.," we find the following: "Sir, — My friend Stanley Turner (Oct. 18, p. 92) has done the profession a useful service in pointing out the probability that the normal work of the doctor in the new Health Service will be enormously increased. When the insured person discovers, as he must do before long, that he is in fact paying, through compulsory insurance, a levy at the rate of from 12s. to ultimately 17s. a week per person, he will undoubtedly and rightly do his best to get his money's worth by increased demands upon the doctor.

"... The five-day 40-hour week is an essential plank in the Socialist programme, and concrete proposals were actually made by the S.M.A. that the medical day of 24 hours should be worked by three eight-hour shifts. It is to be noted that this does not meet the weekend demand, and in the experiment in New Zealand, where the five-day 40-hour week is generally imposed, it has been observed that "it is extremely difficult for the public to secure medical attendance in New Zealand over the weekend.

"Turner mentions that there are 70,000 names on the *Medical Register*, but an authoritative estimate places the number of doctors in *active practice* at approximately 50,000. With a day divided into three shifts, and taking into consideration the increased demand on the doctors' services, I submit that an estimate which places the total medical personnel required by the Act at three times the present number in active practice errs on the side of moderation. If the Minister succeeds in roping in the whole existing body in active practice, he will on this basis still need a further 100,000 doctors to implement the promises of the Act.

"My estimate that the present strength of the medical profession would have to be trebled to meet the needs of the Act receives an independent corroboration. Lord Tevoit, who was for two and a half years chairman of the Inter-Departmental Committee on Dentistry, declared that an authoritative estimate to meet the new Act maintained that the intake of dentists would have to be *three* times as great as at present (*Lords Hansard*, Oct. 8, 1946, column 45).—I am, etc.,
House of Commons. E. Graham-Little."

A realistic consideration of the inevitable costs, confusions and conflicts in connection with the New Deal's proposed compulsory Health Insurance program should cause the President and his cohorts to precipitately withdraw this Bismarckian bust before it boomerangs in their faces. Unlike the German people, the majority of good Americans are still too free and independent to kiss the hand that robs and enslaves them.

1. British Medical Journal. Saturday, November 15, 1947.

THIS IS YOUR MEDICAL JOURNAL

Why don't you do something about it? If it falls far short of your ideals, say so! If it remotely approaches your ideals let us know. If you know how to improve the quality of the Journal in any respect, in any department, please convey your suggestions to the Editor or to some member of the Editorial Board.

The Board is constantly devoting thought and effort in behalf of the Journal's readers. But its individual members are finite; each moving in his little world, fully conscious of his limitations; burdened with a heavy sense of responsibility. The readers of the Journal should shoulder a part of this responsibility by manifesting more interest in its various functions, its purposes and ideals.

Readers are urged to write or visit the Editor or editorial offices. Criticisms are welcomed and of course, commendation cherished when deserved, silence is deadening.

To emphasize our problems, though relatively small, and the need of reader cooperation, the following is being lifted from a pre-

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view chapter of the forthcoming book *Your Newspaper*:¹ "An ideal newspaper might perhaps combine the snap and readability of the New York Daily News, the pictorial excellence of Life, the thoroughness of the Times, the crusading fire of the Post-Dispatch, the human interest and intelligence of the Herald Tribune, and the sense of responsibility of the Courier Journal."

Take pity upon the Journal and its small staff and lend a hand. The address is under the masthead. Sound advice and convincing suggestions can change the blueprint. This is a bright New Year. Let us have your help.

1. If We Could Start a Newspaper. Saturday Review of Literature. Vol. No. 39, September 27, 1947, page 29.

FARMERS, DOCTORS, RACKETEERS, GANGSTERS, BLACK MARKET OPERATORS AND GAMBLERS

The Chicago Tribune Press service brings this interesting revelation out of Washington: "One of the top officials of the treasury department, who is in charge of tax investigation, disclosed for the first time last week that the farmers and medical men are being singled out for special treatment. He estimated that the treasury is losing \$400 millions a year in evaded income taxes, and declared that farmers and physicians are responsible for a large part of this.

"The rest, he said, is accounted for by the tax dodging of such figures as racketeers, gangsters, black market operators and gamblers and by the taxpayers, big and little, who at one time or another fail to include all their income in their returns."

It is not surprising that the tax hungry boys in bureaucracy should pounce upon the farmers and doctors but it is difficult to understand how they can afford to implicate the racketeers, gangsters and gamblers. This is getting mighty close to home. We hold no grief for the latter group. The bureaucrats residing in the city of Washington should know how to deal with them. But a fair comprehension of the life of the farmer or the doctor is not within the faint cerebration of the 16 hour daily reprieve and the long weekends for the recuperation of government employees.

Farmers toil while labor loafs. They work not only 98 hours a week but they keep one eye skinned for hawks and coyotes 168 hours a week. The rest of the time they must worry about floods and famine. Through eternal vigilance and untiring energy they feed and clothe the world, including the bureaucrats in Washington. Some day the farmers may

decide to live on what they grow and let the bureaucrats have "locusts and wild honey" — this is one way to reduce the federal payroll. If the farmers fail to report in full for tax purposes, it may be due to the fact that they have no time to keep books and not to a willful withholding of the facts. This is the skillful business of those who fleece the world, not those who work to feed the world. When the farmer is taxed too heavily the bureaucrats will go hungry. There comes a time. If it were not for the persistent, commendable courage and industry of the farmer, there could be no Thanksgiving, no Christmas cheer, no adequate living.

The doctor's life is not unlike that of the farmer in many respects. He lives to serve and serves that others may live. When war comes he will volunteer to serve his country which is now threatening to treat him like a slave.

Great Britain's well-informed Rebecca West boldly berated her socialistic government by saying, "The individualist is being looted by his own country as if it were an enemy."

Though doctors as a class are being unjustly treated by the New Deal, though the tax laws make no allowance for relative merit and though they are caught in the net of progress and dragged down by abnormal world wide trends, they should maintain their individual integrity by faithfully complying with the tax laws. The few who practice evasion will bring discredit upon a great profession unless they fall in line and pay up before the bureaucratic snoopers appear. Illegal tax evasion within the medical profession represents gross malpractice.

The point of all this argument is that farmers and doctors, having much in common, resent being classified with racketeers, gangsters and gamblers and they prefer to keep their skirts clear of the bureaucrats.

1. Oklahoma City Times, November 16, 1947.

B C G VACCINATIONS

In view of present knowledge gradually accumulated and strikingly augmented by recent intensive studies and programs in Sweden and Denmark, plus the published reports of Aronson and Palmer¹ re B C G vaccination among North American Indians and the present program of the U. S. Public Health Service, it is time for wide dissemination of this knowledge among the members of the medical profession.

In the October issue of the American Re-

view of Tuberculosis Malmros² of Sweden reports 18,000 B C G vaccination cases under his own observation 1942 to 1946 and considers reports on other important studies. The observations of Malmros and others in the Scandinavian countries are so convincing, they are not only worthy of our serious consideration but they constitute the chief motivating force in our own public health survey now underway.

With our changing conception of primary infection and progressive pulmonary tuberculosis, the safety controls guarding the preparation of BCG vaccine and the obvious protection conferred by its use we shall await with interest our Public Health Department's demonstration supplementing the rather promising report of Aronson and Palmer among the Indians. Malmros' summary and conclusions will further clarify the above brief discussion.

"1. Late primary infection is a common cause of progressive pulmonary tuberculosis in young people and adults.

2. The frequently employed terms "reinfection" and "reinfection type" are misleading and should be abandoned.

3. Experiences from an extensive series of investigations and from a school epidemic suggest that nonreactors are specially exposed to the risk of contracting serious tuberculosis if they become infected.

4. BCG vaccination is harmless and gives good protection, and this method should therefore be used to as great an extent as possible.

5. Under no circumstances should students of nursing and medicine be allowed to perform duties at hospitals if they are tuberculin-negative. Only such hospitals as exert scrupulous tuberculosis control, including BCG vaccination of all nonreactors to tuberculin at least six weeks prior to the beginning to their service, should be accepted as training hospitals.

6. A modern tuberculosis control program should include miniature photo-fluorography of all adults and children over 14 years of age, tuberculin-testing of the whole population, with BCG vaccination of all nonreactors. By means of follow-up examinations it should be checked that the vaccinated persons remain tuberculin-positive. Should the tuberculin reaction again become negative, revaccination ought to be done."

American Review of Tuberculosis, October, 1947, 56, 279. (Sweden now has one of the most active campaigns against tuberculosis in the world.)

NUTURING THE NURSING SITUATION

According to Webster *nuture* means "to bring or train up." Today the medical profession and the people are sorely in need of bringing and training up more nurses. This need is acute in our own state. Of all the people vitally concerned, none have the opportunity, the influence and the power to mend this gap equal to that resting in the hands of the physicians and the Woman's Auxiliary.

The President of the A.M.A. has appointed a committee to survey this problem in the United States. Let Oklahoma bestir herself and not be caught among the backward areas of the United States. We must awake and pull ourselves out of this commonplace among the commonwealths of our nation. The physicians of Oklahoma should drive home this need as they make contact with those who might be interested in this noble profession and should encourage local auxiliaries to make it a major objective for 1948.

The seriousness of this situation is attested by empty beds in many of our state hospitals because the nursing service cannot be supplied. Let's not wait for the national committee to tell of Oklahoma's shortage.

THE OATH

When physicians fail to keep the Hippocratic Oath, medicine deteriorates and is discredited. The jealousies, bickering and the back-biting between physicians is incomprehensible.

Before entering the practice of medicine each physician, presumably, accepts this obligation:

"I do solemnly swear by that which I hold most sacred that I will be loyal to the profession of medicine and just and generous to its members; that I will lead my life and practice my art in uprightness and honor; . . . These things I do promise and in proportion as I am faithful to this my oath, may happiness and good repute be ever mine — the opposite if I shall be foresworn."

The physician who never reads the dictionary may forget the sacred meaning of loyalty, uprightness and honor and the medical historian digging up his bones may not say with Whitman

"This dust was once the man gentle, plain, just and resolute . . ."

1. Aronson, J. D. and Palmer, C. E.: Experience with BCG vaccine in the control of tuberculosis among North American Indians, *Pub. Health Rep.*, 1946, 61, 802.

2. Malmros, Haqvin: Late Primary Infection and BCG Vaccination, (From the Central Hospital of Orebro, Sweden),

SCIENTIFIC ARTICLES

SURGICAL TREATMENT OF PEPTIC ULCER WITH A PRELIMINARY REPORT ON VAGOTOMY*

L. J. STARRY, M.D. AND EVERETT B. NEFF, M.D.

OKLAHOMA CITY, OKLAHOMA

Peptic ulcer is the purple heart of modern civilization. Its incidence is alarmingly increasing under the impact of modern times and trends. Its recent recognition as a psychosomatic disease is not new since it was so identified years ago. To those individuals who are the victims of emotional strain, nervous tension, worry and anxiety possibility of upper digestive tract pathology is forever present. It is a consoling thought that from people of such description comes most of our really constructive work and accomplishment. It is such who have a tendency to an overworked gastro-intestinal tract — and the likelihood of peptic ulcer is a portion of the price they are called upon to pay for their inheritance.

The increasingly high incidence of ulcer, particularly among males of the third, fourth and fifth decades of life, makes a consideration of treatment, any treatment, of great importance. We deal here with surgical treatment which is indicated in about 20 per cent of all cases.

At the outset, let it be distinctly understood that even in these enlightened days of scientific advancement, we cannot depart from some of the ancient dicta. One of these is that surgical treatment is indicated only in complicated ulcer or in ulcer characterized by intractable pain. Complications of peptic ulcer are those of perforation, hemorrhage, pyloric obstruction and malignant degeneration. No good argument has ever arisen against the needs of surgical intervention in such cases. Only the time of intervention is left unsettled. It is in the matter of repeated occurrence, usually seasonal, of typical ulcer pain — wherein a lack of unified ideas still exists. It is the studied opinion of the authors that repeated occurrence of pain of such description indicates surgery. Individuals doomed to a life of petting their gastro-intestinal tract with diets and medi-

cation are unable socially or economically to afford the luxury of a semi-annual vacation in a hospital bed. It has been proven that after a certain elapsed period of time irreversible changes in pathology take place in which medical therapy is entirely ineffective.

The senior author (L.J.S.) has had the privilege of living through three phases of surgical treatment for peptic ulcer—the period of gastro-enterotomy, of gastric resection, and of vagus nerve resection, the latter being incorrectly termed vagotomy. One factor is common to all three types; i.e., an effort to eliminate excessive hydrochloric acid. The dictum of “no acid—no ulcer” is the basis for such efforts. Gastric acidity is more fundamental in the pathogenesis of ulcer than motor disturbance since the former is responsible for the latter. In the gastro-jejunosomy, neutralization of the excessive acid is sought. In resection, it is the elimination of acid secreting glands. In vagus resection, it is the elimination of neurogenic stimulation of these glands. In the same proportion as we are successful in the elimination of free hydrochloric acid, may we expect healing of the ulcer. In years past the one drug of importance held by many authorities in treatment of peptic ulcer was atropine. It is a matter of common knowledge that the effect of atropine is found in the blocking of the parasympathetic or vagus impulses at the end organ. This points up the importance of neurogenic stimulation of the acid producing glands. It is primarily by the post-operative study of the acid content of the stomach that we can obtain objective evidence of success or failure of our treatment.

The modernist in surgical thinking would no doubt relegate gastro-enterostomy to a dim background and claim that such a procedure was of historical interest only. Not so. To place such a label on gastro-jejunosomy would be to forget one of the most strikingly effective operations in the entire field of surgical therapy. One should recall the individual past 60 years of age with a

*Presented before the Surgery Section of the Oklahoma State Medical Association at the Annual Meeting, May 14, 1947. From the Department of Surgery, Medical School, University of Oklahoma.

complete pyloric obstruction due to a cicatrizing benign obstructive lesion — with the malnutrition and dehydration accompanying such a condition. In the cases of such description simple posterior gastrojejunostomy is well tolerated, is safe and effective. I know of very few more grateful patients than those of the type described. In the third decade of this century many satisfactory results were secured in relieving pain and treating recurrent hemorrhage by this same method. Just one word of warning should be set down here, and that is that the farther the opening in the jejunum is from the ligament of Treitz, the more likely is the occurrence of a stomal ulcer. Apparently, the more distal jejunal mucosa is less able to combat the corrosive effect of the hydrochloric acid.

In the past 20 years, more and more effort has been put forth in the study of the effect of sub-total gastric resection on the acid content of the stomach. This work centers on the attempt to remove acid producing glands. The authors hold with the idea that it is not necessary to remove the ulcer or ulcer bearing area to secure a definite reduction in acid. In the duodenal ulcer, particularly where there are many adhesions between the duodenum and surrounding viscera, resection would be hazardous to the common duct and the pancreatic ducts.¹ In such cases it has been our practice to do the antral exclusion operation of Wangensteen combined with resection of one-half to three-fourths of the stomach according to the method of Hoffmeister with extra sutures above and below the anastomosis. This eliminates the chemical phase of gastric secretion and consequently causes a reduction in acidity. We have had some experience with the Polya type of resection but believe that this permits a too rapid emptying of the stomach and does not permit sufficient time for mixture of the remaining gastric juice and the food.

This procedure is also used effectively with pyloric ring ulcers which are perhaps the most persistently painful of all types. In this characteristic they are something of the nature of a fissure in ano and are just as amenable to medical treatment as is the fissure.² Recognition of such a position of the ulcer is usually determined by the amount of pyloric spasm.

Juxta-esophageal ulcers on the lesser curvature may also be successfully treated by resection.³ The Hoffmeister type of resection and anastomosis also serves well in this location and again it is not necessary to remove

the ulcer site.

Anastomatic or stomal ulcers are perhaps the greatest factor in neutralizing the enthusiasm for surgical therapy which we know of today. Our internist friends never fail to mention the occurrence of such in discussions of the effectiveness of surgical treatment. These are not seen after resection of the stomach as a rule. We believe that behind such occurrences lies frequently an ulcer diathesis in which no form of treatment short of total gastrectomy offers hope of permanent relief. However, incidence of these ulcers will become increasingly less, the more effective is our treatment in reducing the acidity. The operation of vagus nerve resection at first seemed to be designed primarily for the treatment of stomal ulcers.

We should here mention pyloroplasty as an adjunct to other surgical methods. This can be accomplished very easily — it is not attended by any degree of shock even in the poor risk patient and takes a very short time to accomplish. If one is pressed for time after vagus resection and feels that gastro-jejunostomy would be hazardous, pyloroplasty is the answer. A longitudinal incision through the pyloric ring closed transversely accomplishes the purpose of overcoming pyloric spasm and of possible obstruction.

Dragstedt of Chicago made his first operation on the vagus nerves on the human in January and February of 1943. His first report was June of that same year.⁴ His operations were done at first entirely through the chest. Due to post-operative complications of such an approach and the impossibility of adequate stomach and duodenum exploration he turned to the abdominal approach which today marks his method in practically all cases. So encouraging were his initial results that other surgeons became interested in the operation until at this time it is the most talked of and written about procedure in the surgical treatment of peptic ulcers. Dragstedt found⁵ that hydrochloric acid levels were reduced greatly; in the majority of cases no free hydrochloric acid was found post-operatively. He also noted a two-thirds reduction in the total volume of gastric juice. Motor function was greatly decreased — at times to a level where the stomach without a freely functioning stoma did not empty in 24 hours. Recently the use of the drug, urecholine, five mg. to a dose given hypodermically, relieves this disturbing condition. Some clinics report the appearance of a steatorrhea⁶ following vagus resection.

This would lead one to believe that pancreatic function was interfered with but the reported incidence is too small to be considered at this time. Another complication which should be given some thought is the possibility of the appearance of hypertension after vagal interruption due to the removal of the parasympathetic "brake" on the sympathetic nerves. The time factor has as yet not been sufficient to make deductions on such an effect. The converse may also be true when we consider the many operations of sympathetic resections. Does such lead to an increase in the gastric acidity?

A recent report gives favorable results on the post-cholecystectomy biliary colic without evidence of stone.⁶ In former years this syndrome was associated with spasm of the sphincter of Oddi. The two cases reported gave relief from the condition for 12 and three months. The point we wish to emphasize is that while results have been spectacularly good, time trial has not been sufficient to make accurate and lasting deductions.

We wish to report on 10 cases done since December 26, 1946. All were done by the abdominal approach — the first seven had an accompanying gastrojejunostomy, the most recent three without. Others have been done by our colleagues in Oklahoma City but we report only on those done by us in order to eliminate the variables incident to different techniques.

All 10 cases had their diagnosis verified by finding the ulcer site at operation. Complications were not particularly distressing although we did see post-operative diarrhea in one case which continued some five or six days. In one case, post-operative bleeding from the ulcer site was encountered following a meal of chop suey mistakenly given five days post-operatively. This, although rather copious in amount, was not of long duration and was not repeated. We do not feel that routine gastro-jejunostomy should accompany the vagus resection but should be used only where there is definite evidence of pyloric obstruction. In one case (see chart) an anterior gastro-jejunostomy had to be taken down due to obstruction of the proximal loop. Following this procedure no further difficulty was experienced.

Our technique closely followed that described by Dragstedt. In the majority of cases it was found necessary to cut the triangular ligament between the liver and diaphragm in order to obtain adequate exposure of the hiatus. Warning should be given as

to the possibility of troublesome bleeding from the splenic pedicle. Due to the proximity of this structure great care is necessary to pack the spleen well away from the operative site. We did not find it necessary to tie off the nerves after resection but did take care that the nerve was well cleared of areolar tissue before cutting. Isolation of the nerves was not found to be particularly difficult. One should rely more on the sense of touch rather than vision since the nerves are as taut as violin strings when the elastic structure of the esophagus is retracted downward.

In all cases we found an absence of free hydrochloric acid post-operatively. The insulin test was not enlightening in our hands since we failed to obtain a sufficient reduction in blood sugar with the 20 units of insulin used.

In practically all cases patient response was enthusiastic. One patient wrote that for the first time in over 20 years she was able to eat anything at any time without distress. Such a report cannot but be stimulating to further experience with this procedure.

Emphasis must be placed on the fact that it is too early to make definite conclusions on the remote effects of vagus resection. From reported results and our own few cases reasonable conclusion is that immediate results are encouraging. So encouraging, in fact, that we feel safe in recommending it for your own cases. This procedure should be adopted by abdominal surgeons in order to determine the results to their satisfaction. It is by so doing that the sufferers from complications of peptic ulcer in Oklahoma may receive the same grade of treatment as is possible in neighboring states.

We have in this presentation emphasized the indications for surgical therapy in peptic ulcer. We have again repeated the role of hydrochloric acid in the genesis of ulcer and the necessity for its control. We have reviewed in chronological sequence methods used in this effort. We report on the cases of vagus resection done in the past five months on our service at University and St. Anthony's Hospitals. Finally, we urge all abdominal surgeons to determine for themselves and for their patients suffering from complications of ulcer the effect of this most recent procedure.

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4. Dragstedt, Lester R. and Owens, Frederick M., Jr.: Supra-diaphragmatic Section of the Vagus Nerves in the Treatment of Duodenal Ulcer, *Proceedings of the Society for Experimental Biology and Medicine*, 53:152, (June) 1943.

5. Dragstedt, Lester R.: Section of the Vagus Nerves to the Stomach in the Treatment of Gastro-Duodenal Ulcer, *Minnesota Medicine*, 29:597, (June) 1946.

6. Crile, George, Jr.: *Cleveland Clinic Quarterly*, Vol. 14, No. 2, (April) 1947.

NOTE: Since the reading of this paper and prior to publication, a six months follow-up on the reported cases has been accomplished and several more cases have come to surgery. In the follow-up, we failed to obtain one unsatisfactory report and the majority of the patients were now living on an unrestricted diet without symptoms.

5. Dragstedt, Lester R.: Section of the Vagus Nerves to the Stomach in the Treatment of Gastro-Duodenal Ulcer, Minnesota Medicine, 29:597, (June) 1946.

6. Crile, George, Jr.: Cleveland Clinic Quarterly, Vol. 14, No. 2, (April) 1947.

#1

PATIENT	AGE	RACE	SEX	LOCATION OF ULCER	DURATION OF SYMPTOMS
#1 Mr. CD	63	W	M	DUOD.	20 YRS.
#2 Mrs. LS	57	W	F	DUOD.	3 YRS.
#3 Miss MH	25	W	F	DUOD.	10 YRS.
#4 Mrs. AP	47	W	F	DUOD.	25 YRS.
#5 Mr. WW	55	W	M	DUOD.	10 YRS.
#6 Mr. CRB	40	W	M	DUOD.	10 YRS.
#7 Mr. WB	34	C	M	GASTRIC	2 YRS.
#8 Mr. OBA	37	W	M	DUOD.	3 YRS.
#9 Mr. JMC	52	W	M	GASTRIC	28 YRS.
#10 Mr. EM	53	W	M	DUOD.	1 YR.

BEFORE AFTER

#2

PATIENT	ULCER PAIN		HEMORRHAGE		VOMITING	
	BEFORE	AFTER	BEFORE	AFTER	BEFORE	AFTER
#1	YES	NO	NO	NO	NO	NO
#2	YES	NO	NO	NO	YES	NO
#3	YES	NO	YES	NO	YES	NO
#4	YES	NO	NO	NO	NO	NO
#5	YES	NO	NO	NO	YES	NO
#6	YES	NO	YES	NO	YES	NO
#7	YES	NO	NO	NO	NO	NO
#8	YES	NO	NO	NO	YES	NO
#9	YES	NO	YES	NO	YES	NO
#10	YES	NO	NO	NO	NO	NO

#4

#3			#4					
PATIENT	ABDOMINAL VAGOTOMY	ADD. SURGERY	RESULTS OF VAGOTOMY					
			PATIENT	COMPLICATION	WELL	IMPROVED	UNIMPROVED	MO. PO.
#1	YES	POST.GASTROENT.	#1	RECUR PAIN			1st 3 mo.	5
#2	YES	POST.GASTROENT.	#2	NONE	YES			4
#3	YES	POST.GASTROENT.	#3	NONE	YES			4
#4	YES	POST.GASTROENT.	#4	NONE	YES			4
#5	YES	POST.GASTROENT.	#5	NONE	YES			3
#6	YES	POST.GASTROENT.	#6	NONE	YES			3
#7	YES	NONE	#7	NONE	YES			2
#8	YES	NONE	#8	NONE	YES			2
#9	YES	NONE	#9	OIL. STOMACH		YES		2
#10	YES	ANT.GASTROENT.	#10	TAKE-DOWN OF ANT.GASTROENT		YES		2

DANGER OF LUBRICATING JELLIES IN SURGICAL PROCEDURES

CHARLES ED WHITE, M.D.
MUSKOGEE, OKLAHOMA

In most medical journals, there appear advertisements of lubricating jellies to be used in operative, as well as other medical procedures. These advertisements would lead you to believe that the jellies are sterile at all times. For instance, one popular advertised jelly states, "It is sterile" — the tube is so marked — "In every tube is a metal seal under the cap for extra protection," with large typed letters marked "sealed sterilized." These statements are misleading.

Recently, in preparing for a curettage, a large amount of jelly was squeezed out of a used tube of lubricating jelly on a sterile piece of gauze to be used for lubricating uterine-dilaters.

I requested the surgical supervisor to remove this lubricant and advised her that it was not sterile. She questioned such a statement, stating they always used the lubricating jellies to the last drop for any surgical procedure where jellies were indicated.

To prove the fallacy of the advertisements and the opinion of the surgical supervisors,

I took four tubes of jelly to be cultured. A small amount of the jelly was dropped on plain agar media in petri dishes. The tube that had not been opened was sterile, but the tubes that had been opened were all contaminated. Naturally, the more jelly removed from the tube or the more frequently the tube had been used, the more colonies appeared on the culture media.

Certainly any surgical technique for any surgical procedure would be broken by the use of lubricating jellies after the tube has been opened and used. Cross contaminations are bound to occur and it is my opinion that many of the obscure pelvic inflammatory diseases that occur after sterile technique are probably due to the contamination from lubricating jellies. Lubricating jellies are quite generally used in most hospitals and it is the opinion of the author that once a tube has been opened, the lubricant should not be used in any surgical procedure — unless re-sterilized.

RADIOLOGIC DIAGNOSIS OF THE ACUTE SURGICAL ABDOMEN*

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The many advances in diagnostic techniques in the last 20 years have greatly aided the surgeon in evaluating and diagnosing acute abdominal disease. Radiological examination, especially the scout film, is one such method and I will attempt to discuss and illustrate some of the differential diagnostic features which may be of value in confirmation of the clinical diagnosis. From the onset it must be stressed that the patient is a clinical problem and not an "X-ray study." An adequate and complete history physical examination and pertinent laboratory studies must be done and made available to the consultant radiologist. Only then can he select the proper technique for his examination and properly interpret the findings.

TECHNICAL METHODS

Radiography or fluoroscopic methods may be used; the important feature to be stressed is study in multiple positions, especially in the upright or lateral decubitus using a horizontal X-ray beam. This permits good demonstration of fluid and gas shadows before they are detectable in the usual flat film. Free peritoneal air can only be detected with the horizontal beam used in either the upright or left lateral decubitus positions. If the patient is too ill to be moved, portable films may be of help. It is a good procedure to have the patient X-rayed on admission before being put to bed in the ward.

Contrast media may be used in some cases. In large bowel obstructions a small amount of barium by enema without too much pressure will often confirm the level and etiology of the obstruction. Barium by mouth is contra-indicated, especially in suspected obstructions or perforations; it may be used cautiously and in small amounts in cases intubated from above with the Miller-Abbott tube.¹ Intravenous pyelography is of special importance in cases of ruptured kidney or perinephric abscess. In suspected cases of urinary extravasation following fractures of the pelvis, air may be injected into the bladder and if there is a perforation of the blad-

der, will be seen as free air under the diaphragm.

It is important to remember that diagnostic findings are not always present and sometimes repeated examinations are necessary to detect interval changes.

CLASSIFICATION OF ACUTE ABDOMINAL CONDITIONS

The following classification of the more common acute surgical diseases of the abdomen is suggested for clarity of presentation and discussion.

I. Ileus

A. Mechanical

Level?

Etiology?

Viability of bowel?

1. Adhesions
2. Hernias
3. Internal bands and hernias
4. Tumors
5. Intussusception
6. Volvulus
7. Gall-stone ileus and other obstructions
8. Congenital atresias and maldevelopment, meconium ileus
9. Granulomas—
 - a. Regional enteritis
 - b. Hyperplastic tuberculosis
 - c. Lymphopathia venereum
10. Extremis pressure
 - a. Pelvis tumors
 1. Primary
 2. Drop metastases
 - b. Abscesses

B. Paralytic ileus

1. Peritonitis (localized or spreading)
 - a. Acute pancreatitis
 - b. Mesenteric thrombosis
2. Reflex
 - a. Genito-urinary
 - b. Chest diseases (especially base lesions)
 - c. Blood in peritoneal cavity
 - d. Spine injuries

II. Perforations

A. Peptic ulcer

B. Intestinal ulcers

*Presented before the Surgery Section of the Oklahoma State Medical Association at the Annual Meeting, May 16, 1947.

1. Typhoid
 2. Tuberculosis
 3. Dysentery
 - C. Malignancies — usually stomach or colon
 - D. Inflammatory lesions
 1. Appendicitis
 2. Diverticulitis
 - E. Traumatic
 1. Penetrating wounds
 - Closed injuries
- III. Abdominal abscesses
- A. Appendiceal
 - B. Cholecystic and pericholecystic
 - C. Subphrenic and subhepatic
 - D. Perinephric
 - E. Tubo-ovarian
- IV. Intra-abdominal hemorrhages
- A. Spleen or liver
 - B. Tubal pregnancy

Normally the stomach and colon may contain varying amounts of gas but excluding infants, the small bowel rarely does except in the presence of disease. In ileus there is a disturbance in both the motor and absorptive functions of the bowel. This tends to allow gas, both swallowed by mouth and held in solution in the bowel contents, to become accumulated as free gas in the bowel. The intestinal absorption is impaired and the liquid bowel contents increase.² In paralytic ileus the most important findings are that the pattern of distended gas-filled loops involves the entire colon as well as the small bowel and these loops remain in a relatively fixed position due to muscular atony. In the presence of free fluid or pus there is an increase in the soft tissue shadow between the loops. Mechanical ileus usually involves the small bowel only; the pattern of the loops changes, as there is hyperactive peristalsis, unless the obstruction is in the colon there is no gas pattern seen in the collapsed large bowel. Sometimes incidental findings such as renal and gall bladder calculi, basal pneumonic consolidations, etc., are seen, which account for the paralytic ileus.

In mechanical obstructions we attempt to determine the level of obstruction, the probable etiology, and whether the bowel wall viability has been impaired. Since the bowel distal to the point of obstruction is collapsed, we can estimate the level of the obstruction from the number and location of the distended loops. Distended colon can be differentiated from small bowel by its usual location in the periphery of the abdomen, its characteristic haustral indentations which are sero-

sal and quite different from the small bowel valvulae conniventes (mucosal folds). These folds account for the "herring bone" pattern seen with dilated small bowel loops. Although the ileocecal valve is usually competent enough to prevent back pressure distension of the ileum in cases of colon obstruction, this rule does not always hold and one can find colon obstruction with associated distention of small bowel loops.

Some types of obstruction may show characteristic findings. Intussusception characteristically shows a filling defect with rounded margins and narrowed central lumen; this is best seen with the barium enema. In case of gall-stone obturation, the large stone must perforate into the stomach or duodenum before it becomes lodged at the ileocecal valve. Rigler³ has shown that in these cases gas enters the biliary passages and can be demonstrated in the films. In volvulus, which is usually sigmoid or cecal, the twisting closes off and there is a very marked distension and displacement of this loop. Sometimes twisted mucosal folds can be demonstrated especially with the use of the barium enema. Neuhauser⁴ has recently described a characteristic finding in meconium ileus, a condition in new borns usually associated with fibrocystic disease of the pancreas. The undigested meconium contains small bubbles of air in the loops of undistended small bowel while the proximal loops show the usual obstructive distension.

Although paralytic ileus usually is generalized, there may be localized abdominal lesions such as appendicitis, cholecystitis, pancreatitis, where only the bowel loops near the inflammatory focus show reflex paralytic inhibition and distention. Levitin⁵ has described these as "sentinel loops" and stresses the absence of a normal peritoneal fat line adjacent to such inflammatory lesions due to the associated peritoneal edema. Reflex ileus secondary to peritoneal irritation by blood, gastric contents, etc., or to pain of renal colic or spine injury is very commonly encountered.

FREE PERITONEAL AIR

Although free peritoneal air may be an incidental finding observed following laparotomy, tubal insufflation, or therapeutic pneumoperitoneum, it is a finding of utmost importance in acute abdominal conditions, and signifies perforation of a hollow viscus. As a rule this is a peptic ulcer of the anterior wall of the duodenum or the stomach. However, other ulcerative or inflammatory lesions of

the gastro-intestinal tract may perforate. In closed injuries of the abdomen the bowel can be torn and pneumo-peritoneum detected. Approximately 80 per cent of perforated ulcers will show free air.

ABDOMINAL ABSCESES

The usual intra-abdominal abscesses are suspected because of a septic clinical course which complicates the underlying disease process. These may be located anywhere in the abdomen but the usual sites are sub-phrenic, appendiceal, pelvic and peri-nephric. The inflammatory mass may be outlined as a density surrounded by reflexly distended bowel; usually the properitoneal fat line adjacent to this area is obscured; if there is gas present (due to viscus perforation or gas-producing organisms), localized gas may be demonstrable by a fluid level. Demonstration of displacement of adjacent viscera by a mass, especially colon loops as shown by the barium enema is often a good diagnostic help. It must be remembered that adhesions may form about such an abscess and if they include a knuckle of small bowel cause a complicating small bowel obstruction.

In certain locations abscesses present certain characteristic findings. In sub-phrenic (and liver) abscesses there is a tendency for elevation of the right diaphragm and limitation of its respiratory excursion. As the abscess progresses, not only is there a tendency for the elevation to increase, but by trans-phrenic spread of infection, pleuritis and even pleural effusion supervenes. The liver shadow shows increase in size due to depres-

sion. In the rarer left sub-phrenic abscesses, the stomach gas bubble is depressed. Brown of Cincinnati⁶ has described the "plateau sigh" for subphrenic abscess where the obliteration of the posterior costo-phrenic sinus gives the diaphragm a horizontal plateau appearance in the lateral view.

Perinephric abscess tends to obliterate the kidney outline and cause scoliosis to the side opposite the lesion. With pyelography, the involved kidney shows a fixation to the position with respiration and is oftentimes displaced forward by the pus.

Intra-abdominal hemorrhage usually shows a reflex ileus secondary to irritation of the peritoneum by free blood. In rupture of the spleen, this is most marked in the adjacent greater curvature of the stomach where there is serration of its outline; sometimes the soft tissue mass of the hematoma can be localized.

In conclusion I wish to reiterate that although we cannot in some cases make an exact diagnosis as to the etiology of an obstruction, or the exact site of a perforation, we can aid the surgeon by confirming the clinical diagnosis and the indication for surgery. We can help the surgeon to decide on his method of treatment by giving accurate data as to the extent and location of the pathological involvement.

SUMMARY

A group of commoner acute surgical abdominal lesions are classified and their differential diagnosis by radiologic methods is discussed.

FIGURE 1

FIGURE 2

FIGURE 3

FIGURE 4



Figure 1. Paralytic ileus secondary to perforated appendicitis and generalized peritonitis in a four-year-old girl. Note the gas distended large and small bowel loops. The elevated hazy diaphragm was partially fixed with respiration indicating right subphrenic abscess which was later drained. Miller Abbott tube aided in decompression.

Figure 2. Gas distended loops of small bowel diagnostic of mechanical obstruction. Note the "valvulae conniventes," and normal distal colon filled with barium. Operation revealed internal bands to be the etiological factor.

Figure 3. Diverticulitis of the sigmoid with inclusion of a loop of small bowel in the pericolic abscess. Note the gass filled loops of jejunum in the left upper quadrant indicative of the small bowel obstruction.

Figure 4. Filling defect of the cecum due to intussuscepted carcinoma. Note the irregular central lumen in the area of defect and the thin outline of barium about the intussusceptens.

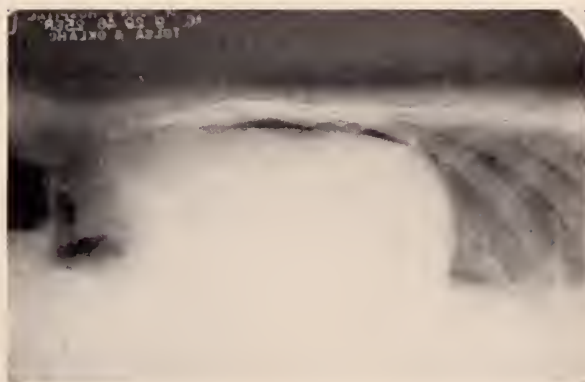
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FIGURE 5

Free peritoneal air above the liver in a case of perforated peptic ulcer. Film taken in left lateral decubitus.

FIGURE 5



ENDOMETRIOSIS*

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INTRODUCTION

When endometrial tissue is found growing outside of the endometrial cavity, the condition is known as endometriosis. Endometriosis is now recognized to be a very frequent finding in patients with gynecological complaints. It is found at operation in perhaps 20 per cent of all pelvic laparotomies. However the condition is usually not diagnosed prior to operation. The symptoms most often caused by endometriosis are pelvic pain, typically premenstrual pain or progressive dysmenorrhea; menstrual abnormalities, most often excessive menstrual flow; and sterility. The treatment of choice is surgical, though surgery is often unsatisfactory for various reasons. Radiation therapy is sometimes helpful. Endocrine therapy has not been adequately investigated, but may in the future have something to offer.

ETIOLOGY

Internal endometriosis, in which the ectopic endometrium is confined to the uterine wall, was carefully studied by Cullen.¹ He demonstrated conclusively that in these cases the ectopic endometrium extends into the myometrium by direct continuity from the endometrium lining the uterine cavity.

External endometriosis, in which ectopic endometrium is found outside of the uterus, has been extensively studied, most particularly by Sampson.² No entirely satisfactory

explanation of its etiology has yet been established. Sampson's well known "spill and implantation" theory has been the most widely accepted one, and is probably the most plausible. According to this theory the initial implants, usually in the ovary, develop from bits of endometrium carried to the peritoneal cavity by retrograde menstruation through the fallopian tubes. Endometrial cysts then form in the ovaries, these rupture and spill endometrial tissue and blood onto any or all of the pelvic peritoneal surfaces, and new growths begin. Many cases of pelvic endometriosis can well be explained by this mechanism, but there are exceptions.

Other theories have dealt with the possibilities of metaplasia of the peritoneal cells, embryonal rests, and lymphatic or venous transportation of endometrial tissue. None of these theories has proved satisfactory.

PATHOLOGY

The lesions of endometriosis most frequently involve the uterine wall, the ovaries, the culdesac, the posterior surface of the uterus, and the recto-vaginal septum. They may also involve the sigmoid, the bladder, pelvic loops of bowel, the appendix; in fact, any of the pelvic peritoneal surfaces. Less often the umbilicus, operative scars, the vagina, and interior of the bladder, are the sites of the endometrial growths. The individual lesions may contain any one or all of the cellular elements of the endometrium. There

*Presented before the Surgery Section of the Oklahoma State Medical Association at the Annual Meeting, May 16, 1947.

may be glands without stroma, stroma without glands, or there may be a complete endometrium with surface epithelium, stroma, and functioning endometrial glands. These lesions characteristically contain a disproportionate amount of fibrous tissue. This ectopic endometrium is usually responsive to the ovarian hormones, and undergoes cyclic changes corresponding roughly with the condition in the uterine cavity. The cyclic response to hormonal stimulation, with bleeding during menstruation, leads to the formation of the characteristic hemorrhagic or tarry cysts, particularly in the ovaries. Such ovarian cysts increase in size from cycle to cycle until they reach a diameter of 8-10 cm., but they only rarely are larger than this. There is a tendency for these cysts to undergo slight ruptures with leakage of hemorrhagic debris. This leakage causes a marked inflammatory reaction with the consequent formation of dense fibrous adhesions which are so typical of this disease. Often all the pelvic organs and adjacent loops of bowel are firmly matted together leaving none of the planes of cleavage which are usually preserved in pelvic inflammatory disease.

Rarely the ectopic endometrium may undergo malignant change and give rise to carcinoma. Two cases of adeno-acanthoma, arising in ovarian endometrial lesions, have recently been reported.³

When the uterus is involved with internal endometriosis, it is usually symmetrically enlarged, softer than normal, and on cut surface the myometrium is thick, often containing small, cystic spaces filled with old hemorrhage. There may be, however, circumscribed nodules of endometrial tissue, often with muscle fibers as well as fibrous stroma. These are described as true adenomyomata. Minor degrees of downward growth of endometrium into the myometrium occur in a high percentage of uteri removed at operation for other reasons, and it is a matter of opinion as to where the normal ends and the abnormal begins.

Mention should be made of the invasive character of endometriosis. The sigmoid may be extensively invaded so as to stimulate carcinoma. The bladder or the bowel may be invaded and perforated, with resulting hematuria or blood in the stools. The presence of endometriosis elsewhere in the pelvis usually suggests the correct diagnosis, but sometimes microscopic examination of the tissue is required to establish the true nature of the lesion.

DIAGNOSIS

Endometriosis is notoriously difficult to diagnose correctly without the aid of operation. Of 754 cases reported by Counsellor⁴ from the Mayo clinic, only 20 per cent were correctly diagnosed prior to operation. However if the possibility of endometriosis is considered in the differential diagnosis in all cases of pelvic pain, menstrual disturbances, sterility, and pelvic masses, and if the history is thoroughly taken and carefully interpreted in each case, the percentage of correct pre-operative diagnoses can be considerably increased.

Perhaps the most constant symptom of endometriosis is pelvic pain. The pain is typically associated with the onset of menstruation. It often begins each month a few days before the appearance of the menstrual flow and gradually subsides as the menstrual period progresses. Later it may persist beyond the period or occur independent of it.

When the menstrual flow is altered by endometriosis, it is usually in the form of excessive flow or menorrhagia. This may be due, in the case of internal endometriosis, to impaired contractility of the uterus. In the case of external endometriosis involving the ovaries, it is probably due to direct damage to the ovarian tissue and consequent abnormality of ovarian function. It may in some cases be secondary to associated pathology such as myomata or endometrial hyperplasia.

It is well known that sterility is frequent in cases of endometriosis, and this may be the patient's chief complaint. When these patients are sterile it is probably on an endocrine basis. Certainly the tubes are usually patent even in advanced cases.

A frequent finding in pelvic endometriosis is an adherant retroposition of the uterus. In these cases the endometrial growth appears to have extended upward from the rectovaginal septum and the utero-sacral ligaments, binding the fundus firmly to the sigmoid colon and rectum. In these cases low back pain, aggravated in the premenstrual period, is a common symptom. Other symptoms may be dyspareunia and pain on defecation.

When symmetrical enlargement of the uterus, adherant retroposition of the uterus, adherant ovarian cysts, or ill defined pelvic masses are found in a patient with a combination of the above symptoms, a diagnosis of endometriosis must be considered. A mass in the rectovaginal septum or nodules in the utero-sacral ligaments lend support to the

possibility. Occasionally a culdesac or recto-vaginal septum lesion will penetrate the vaginal wall, thus making a positive diagnosis possible. Nevertheless an absolute diagnosis of pelvic endometriosis can seldom be made until it is confirmed by operation.

TREATMENT

The treatment of choice in endometriosis is surgical. The requirements for surgical cure are complete removal of all the ectopic lesions or complete removal of all ovarian tissue. In women who are beyond 40, radical surgical procedures including hysterectomy and castration can be done without much hesitation when necessary for a cure. In women of any age with extensive lesions matting together the pelvic organs, there may be no choice other than radical surgery. In cases with large hemorrhagic cysts of both ovaries, all normal ovarian tissue may have been destroyed by the disease itself, and in these cases also radical treatment is indicated. In cases with extensive invasion of the wall of the rectum or sigmoid colon or other portions of the bowel, resection of the disease is often impossible or impractical and castration is the procedure of choice since the bowel lesions will usually regress when ovarian stimulation is eliminated.

There are other types of endometriosis in which surgical cure may be readily obtained by local excision of the disease, leaving the ovaries, tubes, and uterus intact. These include endometriosis of the umbilicus, endometrial lesions in surgical scars, isolated endometrioma of the bladder, and other isolated lesions occurring in the absence of generalized endometriosis.

On the other hand, there remains a large group of cases, particularly young women, in whom it is important to prevent a surgical menopause and to preserve the possibility of future child-bearing. These are the cases which present the most difficult problems and which require the best judgment at the operating table. Conservative procedures are fully justified and should be utilized whenever possible in these younger patients. If at least one intact ovary and tube can be preserved with the uterus, it is certainly worth while to do so in a patient who is highly anxious to have a chance of future pregnancy, even though complete removal of all endometrial lesions may be impossible. In young women some normal ovarian tissue should be saved, if at all possible, even when the uterus has to be removed.

Because of the fact that the continued growth of lesions of endometriosis depends

on stimulation by ovarian hormones, it is possible to arrest the disease by radiation castration. There are several disadvantages to radiation therapy in endometriosis. In the first place, the diagnosis cannot often be made with certainty without laparotomy. In the second place, it is frequently desirable to avoid the castration which is most often an integral part of radiation therapy. In the third place, the symptoms in some cases are caused by adhesions which must be released surgically. On the other hand, there are certain occasions when radiation is a very useful weapon. For instance, when symptoms recur or persist after a conservative operation, the situation may be controlled by x-ray castration, thus avoiding a second laparotomy. Occasionally recurrent lesions in the rectovaginal septum have been cured by radiation locally, sparing the ovaries. But in general the use of radiation therapy in endometriosis is limited, and it is chiefly useful as an adjunct to surgery.

Endocrine therapy probably has a place in the management of endometriosis. In 1940 Wilson⁵ reported reduction in the size of an endometrial mass in the recto-vaginal septum and complete relief of pain during a one-year period of treatment with large doses of testosterone propionate. When treatment was discontinued the mass increased in size and pain recurred. In 1943 Hirst⁶ reported the use of testosterone in the treatment of two cases of advanced endometriosis. His patients were symptomatically improved and the palpable pelvic lesions decreased in size as long as treatment was continued. In 1944 Miller⁷ reported the use of testosterone propionate over a three months' period prior to operation in a patient with advanced endometriosis. He stated that a large mass which lay posterior to the cervix, invading the rectum and perforating the vaginal wall, was reduced to one-third its original size by the testosterone therapy. In March, 1947, Hirst published a further report, listing 19 cases treated with testosterone. Most of his patients were given 150 to 225 mgs. of testosterone propionate in oil injected intramuscularly over a period of two or three weeks, followed by 10 mgs. daily of methyl testosterone orally for variable periods up to three or more years. All patients were improved.

These reports are by no means conclusive, but they do suggest that endometriosis may be temporarily arrested by the use of hormones antagonistic to estrogen. Further investigative work will be required to estab-

lish the role of endocrine therapy in endometriosis.

CONCLUSION

In conclusion, we can say that endometriosis is a frequent gynecological disease. Its etiology is not clearly understood. The lesions may occur in the uterine wall in the ovaries, and on all peritoneal surfaces of the pelvis, as well as the bladder, umbilicus, and in operative scars. The most frequent symptoms are pelvic pain, menstrual abnormalities, and sterility. Pelvic finding suggesting endometriosis are: a symmetrically enlarged uterus, particularly if it is adherent in retro-position, adherent cystic ovaries, nodules in the uterosacral ligaments, or a mass in the recto-vaginal septum. An absolute diagnosis

can only rarely be made without confirmation by laparotomy. The treatment of choice is surgical, and should be conservative in young women. Radiation therapy is occasionally a useful adjunct in therapy. Preliminary reports indicate that androgen therapy may be beneficial in selected cases of endometriosis. It is hoped that future investigations will clarify the role of endocrine preparations in the treatment of this disease.

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SOME MODERN CONCEPTS OF INTESTINAL FUNCTION*

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More people consult doctors because of symptoms arising in or referable to the digestive tract than any other system. Because of this, it occurred to me that a review of some of the recent advances in the field of intestinal function might lead to a more rational basis for treating these common complaints.

My interest in the study of gastro-intestinal disturbances was first stimulated as an undergraduate while studying with Dr. A. C. Ivy, the renowned physiologist who has done so much to advance our knowledge in this line. However, when I began my post-graduate study, I soon learned that auto-intoxication, "visceroptosis," and too much acid in the body were thought by many prominent "stomach specialists" to be responsible for most of the symptoms bringing many of these patients to the doctors. In no field of medicine has more empiricism been followed. Thus have the cultists and practitioners of various shades of quackery found fertile ground in which to flourish.

"Detoxifying" drugs, diets specially designed to deposit fat around the duodenum to be taken while the patient was lying with the foot of his bed elevated 14 inches in the hope of overcoming the ptosis, the applica-

tion of "rose water" belts and many other unsound and unphysiologic procedures were, and in many places still are, in vogue. Is it any wonder, then, that the cultist with his high colonic irrigations, spinal adjustments and "laying on of hands" was pleasing and comforting these sufferers as much as the more orthodox practitioners?

THE LARGE BOWEL

No organ in the body has been more maligned and abused than the colon. After reading the literature of a decade or so ago on this subject, one wondered why the Lord has seen fit to curse us with such a malicious organ which, apparently, served no particularly useful function.

The development of the colon phylogenetically seems to depend on the eating habits of the species concerned. The human colon has some of the characteristics of both meat and vegetable eaters. It is large and distensible and retains its contents for a relatively long time. Its mesenteries allow for a wide range of movement. It is essentially a floating organ, and its position in the abdomen varies with posture, respiration, and distention.

Its various kinks, redundancies, and fixations are merely variations of normal and are compatible with good health. These facts have been demonstrated repeatedly by roent-

*Presented before the Medicine Section of the Oklahoma State Medical Association at the Annual Meeting, May 14, 1947.

genological studies in health and disease, and form the basis of our present knowledge of the colon. The size and time of passage of a column of barium down the intestinal tract of healthy individuals shows great variation. Thus, in one individual a barium meal will be observed to reach the ileocecal valve in 30 minutes while in another it may take five hours. Likewise, filling of the colon is haphazard and varies greatly in normal individuals. The exact part played by the nervous control of the colon has not yet been agreed upon. That the colon receives both sympathetic and parasympathetic fibers has been demonstrated, but their role in the functioning of the bowel has not been proven as has been repeatedly demonstrated by almost universally poor results in autonomic surgery for disorders of the colon.

Moderate stimulation of the autonomic nerve supply to the bowel seems to have an inhibitory effect, but stronger stimulation of parasympathetic fibers arising from the sacral division gives rise to defecation.

It has been shown in megacolon that the plexuses of Meisner and Auerbach undergo atrophy and dissolution where they are hypertrophied in ulcerative colitis.

Probably the most important function of the colon is in the absorption of water, minerals, salts, sugar, and drugs. Most of this takes place in the ascending colon where the contents are fluid, but that the entire colon is capable of carrying on this function is borne out by the fact that proctoclysis has been an accepted method of delivering fluids and electrolytes to the body for many years. Iron and calcium are absorbed by the large intestines.¹ There are different types of motor activity in the colon. The contraction and relaxation of the muscularis mucosa associated with segmental contractions of the taenic coli result in a kneading effect on the contents; the "mass movement" in which the entire content of the colon is propelled into the descending colon; and the relaxation of the anal sphincter and propulsion of the contents of the descending colon, thus completing the act of defecation. The simple attention to this last type of movement, which is so frequently neglected in our busy life today; i.e., the performance of defecation when it needs to be performed, will do away with the most common cause of constipation.

The normal colon secretes mucus and does so in excessive amounts as a protective mechanism in response to an abnormal stimulus acting either locally in the bowel or reflexly

from other organs through the channels of emotion or through any form of irritation. This has been shown conclusively by Bargen.² Thus, the simple occurrence of excessive amounts of mucus in the stool does not warrant the diagnosis of colonic disease.

Other substances are secreted by the mucus membrane of the colon. Patients fed fat-free diets have been shown to have appreciable amounts of fat in the stools, and patients with certain disease processes have been shown to excrete appreciable amounts of nitrogenous substances in the colon with compensatory diminution in urinary nitrogen excretion. From the foregoing, it is self-evident that the unrestricted use of aperients and purgatives might lead to disastrous results.

From the beginning of history, people have been given purgatives in a vain endeavor to keep the bowel empty and to free the body of hypothetic toxins. The theory of auto-intoxication lacks any serious evidence in support of it, and there is much evidence against it. Thus, headache, backache, lassitude, epigastric distress, and even vomiting in susceptible individuals, has been induced by over-distention of the rectum by balloons.

It is inconceivable that if all these symptoms were due to absorption of toxins, they could be relieved so promptly after a bowel movement or, not infrequently, by anything which temporarily reduces the tension within the gastro-intestinal tract such as belching or passage of flatus. In further support of this, there is the frequently demonstrated observation that symptoms arising from the digestive tube are due to disturbances of tone and motility and not necessarily due to organic changes in the bowel wall.

SMALL INTESTINE

The inaccessibility of the small intestine, its greater length and the rapidity with which material moves through it, has delayed our study and knowledge of this portion of the digestive tube more than that of any other division. It has been only within the past few years that Miller³ and others, through the employment of ingeniously devised intubation apparatus, have learned a great deal about the human small intestine.

They determined that the maximum effect of morphine sulfate in the ordinary therapeutic doses was manifest from two to 20 minutes after its subcutaneous injection by a definite contraction of the second portion of the duodenum. The contraction was sufficient to delay gastric evacuation, to empty

a retained balloon of its air and to push a mixture of barium on into the jejunum. After a short period of increased motor activity, the duodenum relaxed, the period of relaxation lasting as long as three hours. Similar but less marked changes occurred in the jejunum and ileum, appearances characteristic of deficiency disease, were observed.

In studies with atropine, its well known depressant action on the motor function of the duodenum, jejunum, ileum, and colon were confirmed. Thus, intubation of the small intestine, in addition to its life-saving effects in the management of small bowel obstruction, is having an important bearing on the study of nutritional problems and the effect of drugs as well as aiding in clinical diagnosis.

Recently, the treatment of obstruction has been facilitated by a gain in knowledge of the biochemical upset associated with it. For instance, prolonged vomiting lowers the plasma protein. This fact rationalizes replacement therapy with blood, plasma, amino acids, and glucose. Likewise, parenteral administration of sodium chloride is important. However, after the serum chlorides have returned to normal, further infusion of saline solution may cause serious harm.⁴

It has long been recognized that the small intestine is the primary absorptive segment of the digestive tract. This has been particularly emphasized when, by reason of disease or trauma, the function of long segments of the small intestine has been reduced or rendered void.

Thus, in such conditions as nontropical sprue, or other deficiency states of similar severity, dextrose is not adequately absorbed. The concentration of calcium in the blood is reduced and peripheral spasm such as carpedal spasm may result. Moreover, the quantity of certain vitamins in the peripheral blood is greatly reduced. The concentration of iron is materially lessened and serious anemia may ensue. These are only a few of the systemic changes which may occur as a result of interference with absorption from the small intestine. These findings have been confirmed by Miller and his associates who have studied segmental absorption by use of double lumen tubes through which electrolytes, chemicals, and drugs could be instilled into various segments of the intestine.

Other pertinent facts learned from study of small bowel absorption show that there is a forced flow of fluid across the intestinal

epithelium in both directions simultaneously, and that the difference in the concentration of the solute in the two streams and the relative rate of flow of the streams determines the direction and magnitude of the net amount of fluid transported.⁵

Absorption of fat is known to take place through the intestinal epithelium. Frazer⁶ has shown that by adding a potent lipase, ingested neutral fat can be changed in the intestinal cells from large globules to fine granules so that lacteals, which ordinarily are filled with a creamy fluid, become almost clear, with the result the same as if fatty acids had been ingested.

Reduction of oxygen tension has been shown to greatly reduce absorption of fat,⁷ and cortical hormone has been shown to greatly influence the absorption of longer chain fatty acids.⁸ Moore⁹ has shown that human beings absorb ferrous more efficiently than ferric iron. One and a half to 15 times more ferrous than ferric iron is absorbed. Patients deficient in iron assimilate it more completely than it is assimilated by normal adults. Effective doses of iron and ammonium citrate and ferrous iron were found by Hazelton and Godfrey¹⁰ not to be irritating. They noted that absorption of iron begins immediately and continues for six hours. The absorption of single doses is as great as that of repeated doses. Whether the subject is fasting or has been fed makes no difference.

Shaw and Deuel¹¹ found that the rate of absorption of carotene was proportional to the amount administered, that there was a definite correlation between amounts of carotene and fat absorbed and that bile played an essential role in the absorption of carotene. The thyroid, adrenals, and the hypophysis significantly affect the rate of absorption of carbohydrates.¹² When these glands are removed, the rate of absorption is decreased and with an excess of thyroxin, the rate of absorption is increased.

THE STOMACH

The stomach is not an essential organ. It serves primarily to store and mix ingestion. That the stomach secretions are not essential to health and well-being is borne out by the ever increasing number of patients who survive total gastrectomies without any demonstrable ill-effects.

Only a few years ago many of the early workers with the gastroscope felt they were opening up broad, new fields of investigation and through its employment were going

to be able to relieve a large segment of the population from unnecessary suffering. Thus, Shindler and his co-workers found that 80 per cent of a group of patients diagnosed as psychoneurotics admitted to the clinics of Chicago University had evidences of some type of gastritis, and were unjustifiably labeled psychoneurotics. They predicted this would hold good for psychoneurotics in general and that it only remained to discover proper therapy for the condition to relieve these sufferers of their complaints. Some early workers even envisioned the gastroscope as replacing fluoroscopy and roentgenology in the study of upper gastro-intestinal disturbances. However, it is felt by most investigators in this field that the place of the gastroscope is primarily an adjunct to X-ray study. The sole condition in which its usefulness excels that of radiographic study is in diagnosing gastritis.

The present consensus is that gastritis in most patients is not productive of symptoms. Since there is still no known therapy of proven benefit for most forms of gastritis, the gastroscope has assumed a rather minor role in the study of disorders of the stomach. Achlohydria or achylia gastrica in most people is probably not productive of symptoms. Thus, this finding is only of importance as it is related to other conditions. Pernicious anemia develops only in the presence of achlohydria and it is felt by many that malignancy of the stomach occurs only in people having achlohydria.

After a careful perusal of the literature on the subject and personal study of the problem for a number of years, it is my belief that primary gastric ulcers seldom, if ever, become malignant. The finding of cancer cells in a portion of an ulcer is not proof of a benign ulcer undergoing malignant changes. It has been repeatedly shown that malignant lesions of the stomach may become completely epithelialized for short periods of time and conversely break down and ulcerate, the ulcerative process extending beyond the area of malignant involvement in some cases.

COMMENTS

Emotional and nervous factors play a very important role in absorption, secretion, and motor activity of the intestinal tract and account for the major complaints of many patients seeking relief of symptoms referable to the intestine. Because emotion, nervous stress, physical effort, or lack of it, the

nature of the food and drink ingested and various other bodily functions and habits, as well as states of disease directly and indirectly affect intestinal function, it is not difficult to think of the intestinal tract as a mirror wherein is reflected the status of bodily activities.

No detailed effort will be made here to enter into the psychosomatic phases of the problems involved. However, because of their importance in the proper evaluation of what brings the patient to the doctor, they should be sought for in every case and proper attention given to their solution, if intelligent and satisfactory results are to be obtained in the proper management of these patients. In many cases, this is best done following a thorough examination, by merely pointing out to the individual how nervous influences can give rise to their complaints and helping them to develop a better insight into their problem.

A brief discussion of the autonomic nervous system and some of its known effects on the digestive tract when disturbed by fear, anxiety, anger, or other intense emotion, is beneficial. This, along with a frank discussion of the individual's home and environmental situation, encouraging the patient to develop a little more understanding and patience of the particular person giving rise to most of his tension, will frequently be productive of most gratifying results.

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CLINICAL PATHOLOGIC CONFERENCE

The University of Oklahoma School of Medicine

Presented by the Departments of Pathology and Medicine

HOWARD C. HOPPS, M.D. AND ROBERT H. BAYLEY, M.D.

OKLAHOMA CITY, OKLAHOMA

DR. HOPPS: Dr. Bayley never saw this patient and his information regarding the case is identical to that which has been furnished to each of you. Although we know considerable of this patient's past history, the brevity and character of her present illness poses many questions for Dr. Bayley to consider.

PROTOCOL

Patient: F. K., white female, age 61, admitted April 8, 1947; died April 12, 1947.

Chief Complaint: Comatose state.

Present Illness: This patient was admitted to the University Hospitals on April 8, 1947, in coma. She had been having nocturia two to four times nightly, and had been treated for congestive heart failure with partial relief, for a period of three months. The details of this are not available. It was known that the patient was a hypertensive and that her urine had a low fixed specific gravity and contained protein.

Past History: In 1930 the patient was hospitalized here because of bronchopneumonia. At that time her B. P. was 126/76 and an examination of the heart revealed no abnormalities. During this hospitalization she developed hematuria and pyuria. From 50 to innumerable WBC's were found repeatedly in voided specimens, but the only catheterized specimen examined showed no WBC's. On one occasion only, RBC's — 50 per h.p.f., were reported. All of the later specimens contained hyalin and granular casts and usually there was a trace of protein. The NPN was 85 mg. per cent and the BUN 36 mg. per cent. On PSP excretion test, 25 per cent of the dye was recovered in the first specimen and 10 per cent in the second specimen. The patient recovered from her pneumonia, was discharged, and was soon able to resume her duties as a nurse. She was seen in the Outpatient Department again in March, 1945. At this time she revealed that she had suffered from a cough, productive of mucus, for 12 years. She had been dyspneic on exertion for one year. In the past three

weeks she had suffered three severe attacks, resembling asthma, which came on at rest. At this time her blood pressure was 184/116 and the heart was "enlarged to the left." There were no murmurs. Muscular rales were present in both lung fields. There was questionable pretibial edema. An electrocardiogram revealed left ventricular preponderance. The wheezing attacks were controlled by ephedrine grains $\frac{3}{8}$. Nine months later, in December, 1945, after suffering from a "cold and cough" and having had increasing fatigue and dyspnea for several days, the patient suddenly collapsed. When seen shortly thereafter by an M.D., she was stuporous, markedly dyspneic, and quite cyanotic. She had suffered no pain. The pulse was 95 and regular. B. P. was 90/?. There were bilateral rales and ronchi in the chest. She partially responded to morphine, aminophylline intravenously, and oxygen. She was brought to the University Hospitals where a chest x-ray revealed, "cardiac shadow increased in size" and increased peribronchial markings in both lungs. After admission the B. P. rose to 188/115. There was four plus proteinuria with WBS's and finely granular casts. The electrocardiogram, as before, gave evidence of left ventricular preponderance. She was treated with penicillin and amodrine, and was discharged in six days markedly improved.

Physical Examination: Revealed an obese woman in deep coma with Cheyne-Stokes respiration. B. P. was 190/112, pulse was regular and 100 min. There were moist inspiratory rales in both lung bases. The heart was enlarged to the left. The abdomen was prominent and there was a suggestion of a fluid wave. Ankles were edematous. There was a small nodule at the isthmus of the thyroid.

Laboratory Data: RBC's and hemoglobin were within normal limits. Leukocytes numbered 19,200/cu. mm. with 88 per cent neutrophils, 8 per cent lymphocytes, and 4 per cent monocytes. B.U.N. was 31.5 mg. per

cent and blood creatinine 2.4 mg. per cent.

Clinical Course: The patient had several generalized convulsions every day, controlled fairly well with barbiturates, given parenterally. In addition she received 5 and 10 per cent dextrose intravenously, penicillin, digtotoxin, coramine, and caffeine. Her course was one of steady decline and she expired on the fifth hospital day.

CLINICAL DIAGNOSIS

DR. BAYLEY: The patient, a white female 61 years of age, was admitted to the hospital in a comatose state. As is usually the case, the patient was brought to the hospital by a person who could give little information of importance. We are dependent then almost entirely upon physical findings if we are to determine the basis for this condition. One of the first things that we wish to know is the size of the pupils. It is unfortunate that this information was not recorded on the patient's chart. If we had been informed that they were markedly contracted, we would consider such things as morphine poisoning, uremia, or cerebellar-pontine hemorrhage. Hemorrhage in other regions of the brain, particularly if it involved the ventricles, would be expected to produce pupils of unequal size. Markedly dilated pupils are not of great help from the standpoint of diagnosis since they may be a result of marked anoxia and thus follow any of a considerable number of conditions. In diabetic coma the size of the pupils is variable. There is no mention of the odor of the patient's breath which would be the second important point in the physical examination. In uremia the breath has a urinary odor; in diabetic coma, the odor is organic in origin, that of acetone and related substances. In alcoholic coma, the odor of alcohol is quite evident. We are thus considerably handicapped because of a lack of this information. Cheyne-Stokes respiration is usually indicative of decreased sensitivity of the respiratory center. It is not characteristic of cerebral hemorrhage. The blood pressure is recorded as 190/112 and this is the first information of positive help. It is indicative of hypertension and immediately directs our attention to three possibilities: 1) cardiac failure and this includes infarction — approximately 75 per cent of patients dying of hypertension die of this cause; 2) brain hemorrhage — approximately 15 per cent of hypertensives die of this cause; 3) renal failure with uremia — this accounts for approximately 5 per cent of hypertensive deaths. Evidence of heart fail-

ure is found in the enlarged heart, the moist rales heard in both lung bases, the prominent abdomen with suggestion of a fluid wave and the ankle edema.

Let's examine the patient's past history and see if we can find data there to support one of the possibilities that has been considered. At the age of 45 (1930) her blood pressure was 126/75, a normal blood pressure. This is strong evidence against essential hypertension since with this condition, high blood pressure is well established by the age of 45 years. As a matter of fact the average age of death for a patient with essential hypertension is 55 years of age and usually there is a history of hypertension for 15 or 20 years at that time. It seems likely then that this patient's hypertension was renal in origin. Continuing with the past history we find that 17 years ago, during her hospitalization here for bronchopneumonia, the patient developed hematuria and pyuria. From 50 to innumerable WBC's were found repeatedly in voided specimens, but the only catheterized specimen examined showed no WBC's. This is very significant and certainly should be checked by other examinations of catheterized specimens. On one occasion, only RBC's 50/h.p.f. were reported. All of the later specimens contained hyaline and granular casts and usually there was a trace of albumin. What is the relationship of these findings to the pneumonia? It is possible that pneumonia leading to bacteremia or septicemia may produce an actual bacterial infection within the kidney, but this is quite rare. If the pneumonia were produced by hemolytic streptococci, it is possible that glomerulonephritis may have resulted. The urinary findings would be more in keeping with glomerulonephritis than pyelonephritis since a catheterized specimen contained many RBC's but no WBC's. The patient recovered from her pneumonia and was discharged. Then she resumed her work as a nurse. She was next seen in the Outpatient Department in March, 1945, complaining of a cough, productive of mucus, which she stated was of 12 years duration. She had been dyspneic on exertion for one year. During the past three weeks she had had three severe attacks resembling asthma; these came on at rest. It might be helpful to know the time of day they occurred, because true asthma is much more frequent in the early morning, 3 to 5 A. M. Since we have positive evidence of hypertension at this time and evidence also of heart failure, we must con-

sider the possibility that this is cardiac "asthma." If this is so, it is a serious prognostic sign and means that the patient has, on the average, approximately one year to live. On the other hand, bronchial asthma is common in these people, usually bacterial in origin and related to chronic sinus trouble, low grade bronchitis or bronchiectasis. Chronic pulmonary edema, secondary to pulmonary congestion, contributes to this so that true asthma frequently occurs in people with mild, long continued heart failure. Cystic lung disease is common at this age and should be considered in the differential diagnosis. So far as we have gone in our analysis it seems most likely that following nephritis, which was evident in 1930, the patient developed *renal hypertension* and subsequent cardiac failure on this basis. It is likely that the patient had *glomerulonephritis*. This brings up an interesting point. The hypertension which follows chronic glomerulonephritis is not so great (diastolic rarely exceeds 120 mm.) as is the case in so-called essential hypertension where the diastolic pressure frequently exceeds 150 mm. December, 1945, after suffering from a cold and cough, increasing fatigue and dyspnea, she suddenly collapsed. When seen shortly thereafter by an M.D., she was stuporous, markedly dyspneic and quite cyanotic; she suffered no pain; her pulse was 95, her blood pressure 90 ?. There were bilateral rales and ronchi in the chest. One would think first of a cardiac infarct if it were not for the rather prompt recovery and the lack of confirmatory evidence in the E.C.G. It seems more likely that this represented transitory left ventricular failure and is thus analogous to cardiac "asthma." That would fit the clinical picture pretty well and suggest that prior asthmatic attacks were probably on a cardiac basis. Incidentally, the lack of eosinophilia is another point in favor of cardiac "asthma."

Convulsions were an outstanding characteristic of the last admission. This doesn't help much with our differential diagnosis because uremia with convulsions could follow either primary renal disease, e.g., glomerulonephritis, pyelonephritis, etc., or renal disease (arteriolo-nephrosclerosis) secondary to hypertension. The latter seems unlikely in this case for reasons already mentioned. Among primary renal diseases, we have already considered glomerulonephritis, and I think this the most likely diagnosis. We must mention also as possibilities: *pyelonephritis*, *polycystic kidneys*, and *renal tuberculosis*. There is no evidence pointing spe-

cifically to any of these.

In conclusion then, I believe that this patient had chronic glomerulonephritis with renal hypertension, and that death was an effect predominantly of renal failure.

CLINICAL DISCUSSION

QUESTION: Do you consider that cerebral hemorrhage may have been a terminal event?

DR. BAYLEY: There was no report on spinal fluid and the clinical picture was not suggestive of this. Irregular pupils and deep coma would have been indicative of the typical brain hemorrhage that is often seen in hypertension.

ANATOMIC DIAGNOSIS

DR. HOPPS: Upon opening the abdominal cavity we were rather surprised to encounter a small quantity of dark brownish fluid containing tiny yellow globules of fat. This was largely confined to the left upper quadrant in the region of the greater curvature of the stomach and apparently arose from a ragged, irregular three cm. perforation in this portion of the stomach. There was no apparent inflammatory reaction to this and the appearance of the gastric lesion suggested that it was an agonal occurrence. Similar, but smaller, sharply circumscribed ulcers were found in the cardiac portion of the esophagus. Gastric contents were present in both pleural cavities in small quantity. The pericardial sac was not remarkable. The heart was moderately hypertrophied and slightly dilated. Particularly the left ventricle was thickened to 1.8-2.0 cm. (normal 1.2-1.4 cm.) There was no gross evidence of softening or fibrosis. Cross sections of coronary arteries at .4 cm. intervals revealed a minimum of atherosclerosis and no evidence of obstruction.

The lungs together weighed 1000 Gms., nearly twice the normal. This was an effect of moderate hypostatic pneumonia. There was, as Dr. Bayley suggested, slight bronchiectasis. This involved the majority of small bronchi and suggested that some of the patient's symptoms might have resulted from bronchial asthma. The lungs, also the liver and spleen, gave gross and microscopic evidence of moderate chronic passive congestion, substantiating the clinical evidence of congestive failure.

The kidneys were similar, each weighed 90 grams. The capsule stripped easily to reveal a diffusely finely granular surface. The parenchyma was of moderate increased density and cut with slightly increased difficulty. Cortico-medullary differentiation was con-

siderably obscured. The cortex was thinned to about half the usual width. Histologically the kidneys presented evidence of two serious diseases: chronic glomerulonephritis and malignant nephrosclerosis. Each of these had wrought considerable damage. I shall not discuss histopathologic changes in detail nor the difficulties frequently encountered in distinguishing between a primary renal disease such as glomerulonephritis and the effects of renal hypertension, since hypertension itself may cause superimposed renal disease of an entirely different type, i.e., arteriolar nephrosclerosis.

The most important changes, relating to the immediate cause of death, were found in the brain. The brain was not increased in weight nor otherwise remarkable except for an irregular area of softening and hemorrhagic discoloration four by four cm. on the inferior surface of the right occipital lobe. Sections of the brain revealed that this hemorrhage extended to a depth of 2.5 cm. with complete destruction of the parenchyma. Microscopic examination revealed that at the periphery of the hemorrhagic area there were several small arteries which exhibited marked fibrinoid necrosis and thrombosis. It seems quite likely that it was this sort of vascular change which was responsible for the cerebral hemorrhage.

Our final anatomic diagnosis was:

Glomerulonephritis, chronic (inactive), with marked arteriolonephrosclerosis, malignant phase

Intracerebral hemorrhage, focal and diffuse secondary to fibrinoid necrosis of arterioles

Hypertrophy of the heart

Passive congestion of the lungs, chronic and acute, with hypostatic bronchopneumonia

Bronchiectasis, bilateral, with atelectasis and emphysema

Passive congestion of liver and spleen, chronic

Dependent subcutaneous edema

Agonal ulceration of stomach and esophagus with perforation

Adenomata of thyroid gland

Atherosclerosis of aorta and cerebral arteries, moderate

Cystitis, chronic

Meningioma left parietal area (0.7 cm.)

Dorsal kyphosis and deformity of sternum

Emaciation

We concluded that the patient's hyperten-

sion was secondary to an old glomerulonephritis and that this progressed to a malignant phase. It was probably the fibrinoid necrosis of small arteries which led to the cerebral hemorrhage which was the immediate cause of death.

MEET OUR CONTRIBUTORS

Simon Pollack, M.D., D.A.B.R., Oklahoma City, is the author of "Radiologic Diagnosis of the Acute Surgical Abdomen" appearing in this issue of the Journal. He is a graduate of Rush Medical College, University of Chicago, 1935. His specialty is radiology and he is a member of the American College of Radiology and the Oklahoma State Radiological Society. Dr. Pollack has also been certified by the Radiology Board. He is now practicing radiology in Tulsa and his previous locations are: resident radiologist, Cook County Hospital, Chicago, Ill., Lt. Col. U. S. Army, M.C., Chief of Radiological Services at Station Hospital, Camp Hulen and Camp Hood, Texas; and staff radiologist, St. John's Hospital, Tulsa, Oklahoma.

L. J. Starry, M.D., F.A.C.S., F.I.C.S., Oklahoma City, wrote "Surgical Treatment of Peptic Ulcer with a Preliminary Report on Vagotomy" in the January Journal. He graduated from Washington University in 1919 and specializes in general surgery. Dr. Starry is a member of the board of directors, chairman of the surgical section of the O.S.M.A. and a member of the House of Delegates.

W. Turner Bynum, M.D., F.A.C.P., Oklahoma City, contributed the scientific article "Some Modern Concepts of Intestinal Function" in the Journal this month. A graduate of Northwestern in 1934, he limits his specialty to internal medicine. Dr. Bynum is a diplomate of the American Board of internal medicine. He was certified by the Board of Internal Medicine in 1940. Before coming to Oklahoma City in 1943, he practiced in Chickasha for five years. Dr. Bynum is a member of the U. S. Naval Reserves.

Henry G. Bennett, Jr., M.D., Oklahoma City, is the author of "Endometriosis" in this Journal. In 1936 he graduated from Johns Hopkins Medical School and now limits his practice to gynecology. He is a member of the Oklahoma City Obstetric and Gynecology Society. Dr. Bennett has been certified by the American Board of Obstetrics and Gynecology and did his residency at Johns Hopkins Hospital, Baltimore. He also served four years in the army from 1941 to 1945.

Charles Ed White, M.D., Muskogee, wrote "The Danger of Lubricating Jellies in Surgical Procedures." He graduated from the University of Tennessee in 1923 and practiced in Pawhuska for a short time before coming to Muskogee. He specializes in obstetrics and gynecology but does not limit his practice to his specialty. Dr. White is a member of the Southern Medical Association, Oklahoma City Obstetrics and Gynecology Society, American Congress of Obstetrics and Gynecology and other organizations. Dr. White has held every office in his county society except secretary-treasurer and was a member of the House of Delegates for 12 years. He has also been chairman of the section on obstetrics and pediatrics.

(Continued on Page 38)

President's Page

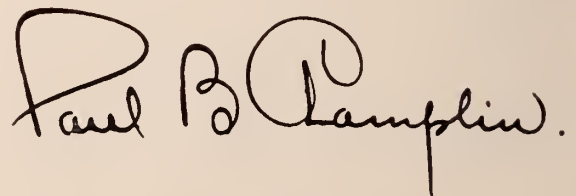
The American custom of celebrating the coming of each New Year with resolutions and pledges of a better life for ourselves and our families should have a greater solemnity than that accorded the custom by many of our self-appointed public comedians.

Whether rededications come at the beginning of a New Year is of little importance. It is the spirit and thoughts of such occasions that count.

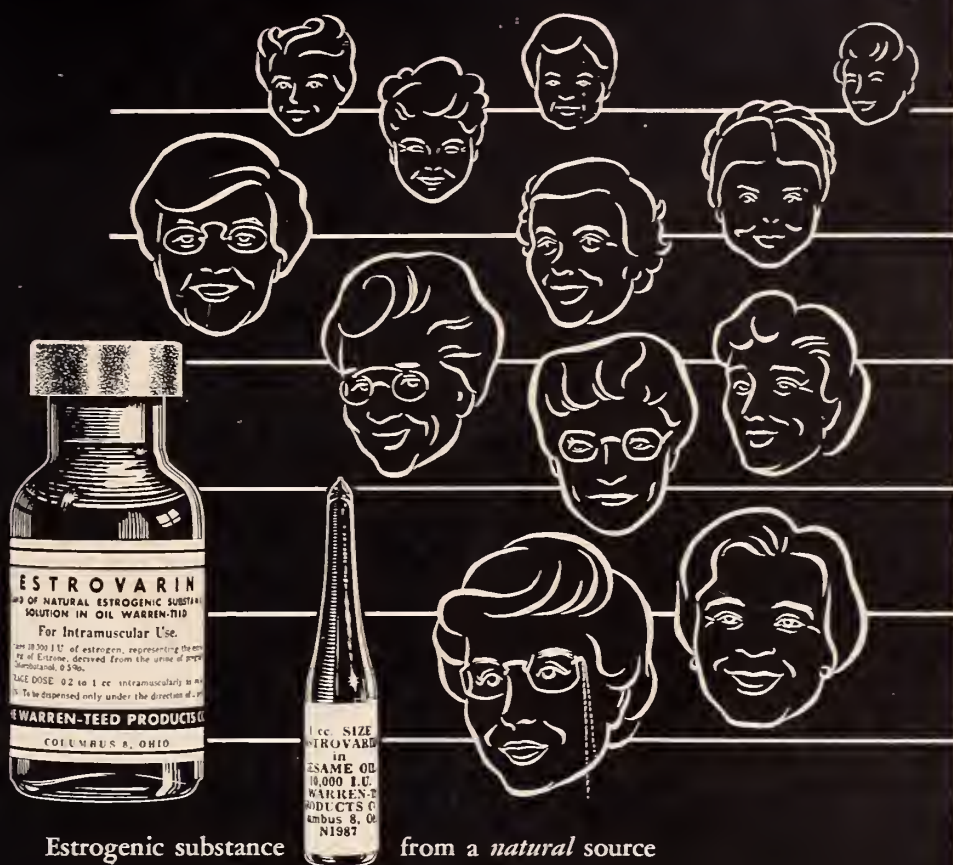
Medicine today can stand some New Year resolutions both on a collective and individual basis. A re-affirmation of Hippocrates oath could well be medicine's New Year's Resolution.

The officers of your Association know they too should have some resolutions concerning the conduct of the affairs of the Association. To accomplish this purpose each member of the Association will receive with his 1948 membership card and certificate a questionnaire on which he may express his opinion as to the general policies of the Association.

Your Association is a democratic organization and this is your New Year's opportunity to participate in shaping its 1948 destiny.

A handwritten signature in dark ink, reading "Paul B. Campkin." The signature is written in a cursive style with large, flowing letters.

President.



ESTROVARIN

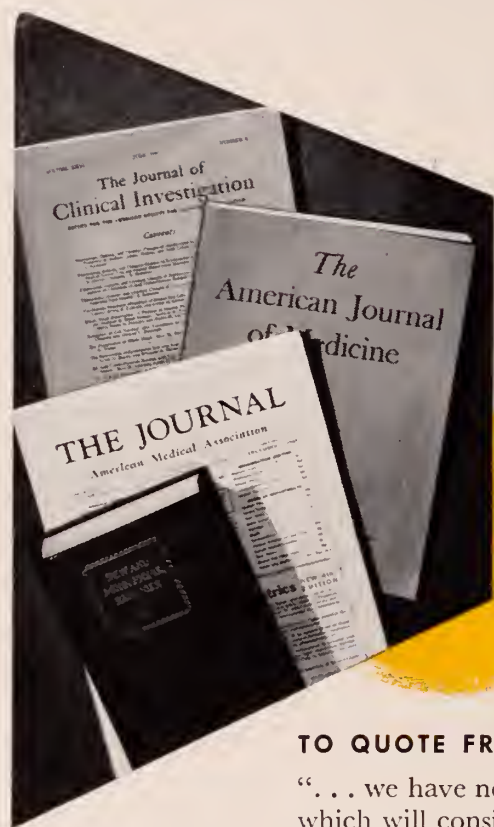
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SEARLE RESEARCH IN THE SERVICE OF MEDICINE

GENERAL NEWS

ACADEMY ORGANIZED IN STATE FOR GENERAL PRACTITIONERS

Oklahoma now has an organization for the general practitioner which promises to become a group as active as any of the organizations for the physicians who specialize. Organization meeting for the group, which is the Oklahoma chapter of the American Academy of General Practitioners, was held Sunday, December 14, at the Biltmore hotel in Oklahoma City.

The first movement for the national group was begun at the A.M.A. convention in San Francisco in 1946 and a temporary organization was started. The organization was founded June 10, 1947, at the A.M.A. convention in Atlantic City and five Oklahomans, George Ross, M.D., and Hope Ross, M.D., Enid; Violet Sturgeon, M.D., Hennessey, and Malcolm Phelps, M.D., El Reno, attended this meeting.

Dr. Phelps was elected temporary chairman for the Oklahoma group at the meeting held December 14. Other temporary officers elected to serve until the next meeting are: D. G. Willard, M.D., Norman, vice-chairman; Ned Burleson, M.D., Prague, secretary and treasurer. Those named to the board of directors are: district one, Francis R. First, M.D., Checotah; district two, Francis R. First, Jr., M.D., Checotah; district three, Haskell Smith, M.D., Stillwater; district four, Frances B. Newlin, M.D., Shawnee; district five, James S. Petty, M.D., Guthrie; district six, Edward T. Cook, Jr., M.D., Anadarko; district seven, James F. McMurry, M.D., Sentinel; and district eight, Joe L. Duer, M.D., Woodward. Physicians from other districts were elected to fill the board positions of congressional districts which had no representation at the meeting.

J. P. Sanders, M.D., Shreveport, who is one of the national directors of the organization, was present for the meeting and explained the constitution of the Louisiana group. It was adopted by the Oklahoma Academy with the necessary changes.

Objects and purposes for which this association is formed are six-point: to promote and maintain high standards of the general practice of medicine and surgery; to encourage and assist in providing postgraduate study for general practitioners in medicine and surgery and to encourage and assist practicing physicians and surgeons to participate in such training; to assist young men and women to prepare, qualify, and establish themselves in general practice; to protect the right of the general practitioner and to engage in medical and surgical procedures for which is he qualified by training and experience; to advance medical science and private and public health; and to maintain private patient-physician relationship. The Academy is not for profit.

To be eligible for general membership, the applicant must be a physician engaged in general practice. He must be of high moral and professional character. He must have graduated from a medical school approved by the A.M.A. and must be duly licensed to practice in the State of Oklahoma and must be a member of the local medical society of the area in which he practices. He must have had at least one year of rotating internship at an acceptable hospital or the equivalent in postgraduate training. He must have been engaged in the general practice of medicine for at least three years immediately preceding the date of his application for membership.

He must also have shown interest in continuing his

medical advancement by engaging in some postgraduate educational activities during said three year period. Any general membership shall terminate at the end of three years, and to be eligible for re-election to general membership a general member must have maintained his moral and professional character, and must have spent a minimum of 150 hours in postgraduate training. The state Academy is to decide what shall constitute hours of postgraduate study and it is believed that attendance at the annual meeting of the Oklahoma State Medical Association, conventions of the A.M.A., Clinical Society, and postgraduate lectures will all count toward hours of postgraduate study.

NEW POSITIONS CREATED AT SCHOOL OF MEDICINE

The Board of Regents of the University of Oklahoma created two new positions in the school of medicine at their December meeting. These are medical director of the University Hospitals and business administrator. The medical director will exercise control over all professional services including the resident and visiting staff, nurses, laboratories, admissions, records, and the out-patient department. The business administrator will be in charge of all finances, and those hospital activities not handled by the medical director. Both these men will be responsible to the dean of the medical school. Dean Mark R. Everett indicated that it is unlikely that these positions will be filled for several months.

Mrs. Ada R. Crocker has accepted a temporary appointment as director of the school of nursing, and will serve until March 31, 1948. She will assist the University Hospitals' executive board to reorganize the school of nursing and to secure key personnel to fill the vacancies created by resignations last fall. Mrs. Crocker was superintendent of nurses at the University Hospitals from 1924-1928. Since leaving here she has been director of the school of nursing at St. Luke's Hospital, Chicago, and deau of the Cook County School of Nursing, Chicago.

Howard A. Bennett, M.D., has been appointed professor of anesthesiology, and will begin his duties in February, 1948. Dr. Bennett is a graduate of the school of medicine of the University of Iowa, and following a period of army service, took a residency in anesthesiology at the Iowa University Hospitals. He will receive a master of science in anesthesiology in February, 1948, and is qualified for the American Board of Anesthesiology.

At a meeting in January, 1948, the general faculty will hear the report of the departmental reorganization committee. This committee under the chairmanship of Basil Hayes, M.D., has been studying departmental problems since November, 1947. The study was requested by President George L. Cross. It is expected that the report will deal chiefly with departmental chairmanship tenure, and departmental administration.

The building program which is in progress is nearing completion, and Paul H. Fesler, hospital administrator, expects the new nursing home to be ready for occupancy in February, 1948, and the new hospital wing in March, 1948; the power house addition will require more time.

A new speech and hearing clinic has been opened at the Crippled Children's Hospital, and is under the direction of John Keys, M.D. This clinic occupies several sound-proofed rooms and has several thousand dollars worth of sound equipment. Its services are available to both charity and private cases.

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CANCER DEATHS SECOND ONLY TO HEART DISEASE IN OKLAHOMA

Cancer now ranks second only to diseases of the heart as a cause of death in Oklahoma. Because of the magnitude of the cancer problem and increasing evidence that many deaths from cancer can be prevented or at least postponed by early diagnosis and adequate treatment, there has been an apparent need for more general knowledge of cancer morbidity as well as continuing knowledge of cancer mortality.

Effective August 15, 1947, cancer was made a reportable disease condition by the State Department of Health. Each physician in the state was sent a supply of special "Report of Malignant Neoplasm" slips and requested to report immediately all cancer cases known to him at that time and, in the future, to report new cases as they were diagnosed. By October 14, 541 case reports for malignant neoplasms had been received.

Table One distributes these cases according to the primary anatomical site of the lesion. It was found that the greatest number had their primary site either in the digestive organs and peritoneum or on the skin, with the two groups comprising 37.8 per cent of the total. Cancer of the uterus, with 85 cases reported, and cancer of the breast, with 77 cases, together accounted for an additional 30.1 per cent. Least frequently found was cancer of the brain and other parts of the central nervous system, of which only two cases were reported.

TABLE ONE

Reported Cases of Malignancy, by Primary Site of Lesion
August 15, 1947-October 14, 1947
Oklahoma

Primary Site	Number of Cases	Per Cent of Cases
Total	541	100.0
Buccal cavity and pharynx	36	6.6
Digestive organs and peritoneum	102	18.9
Respiratory system	19	3.5
Uterus	85	15.7
Other female genital organs	6	1.1
Breast	77	14.2
Male genital organs	42	7.8
Urinary organs	12	2.2
Skin (except vulva, scrotum and anus)	102	18.9
Brain and other parts of central nervous system	2	0.4
Other and unspecified organs	58	10.7

Of the 428 case reports which stated whether or not a biopsy had been performed 249, 58.2 per cent, had biopsy and for 179, 41.8 per cent, no biopsy was performed.

Metastasis from the primary site was known to have occurred in 194 cases and was not evident in 209 cases. For the remaining 138 reports no information regarding metastasis is available. Reports indicated that in these cases metastasis occurred more frequently from cancer of the male genital organs, which metastasized in 76.7 per cent of cases for which data are available, and from cancer of the breast, with metastasis in 72.1 per cent of the cases. Almost equally as frequent was metastasis from the digestive organs and peritoneum, which occurred in 71.0 per cent of the cases. Malignancies of the skin rarely metastasized, in only 3.8 per cent of the reports giving data on metastasis.

The morbidity rate established during the two month report period was much higher for the white group, 139.8 per 100,000 estimated population, than for non-whites, 78.2 per 100,000 estimated population, as shown in Table Two. Comparison of rates for males and females

at a rate of 149.4 as compared with 118.6 for the former. However, for certain types of cancer the incidence was much higher among males. The morbidity rate for males from cancer of the respiratory system was approximately higher incidence of cancer among the latter group, namely five times as high as for females; malignancies of buccal cavity and pharynx, approximately four times as high; and cancer of the skin, about twice as high.

TABLE TWO

Morbidity Rates by Race
August 15, 1947-October 14, 1947
Oklahoma

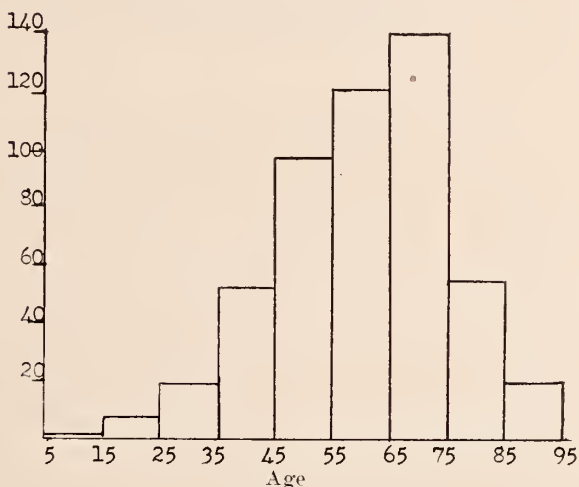
	Number	Rate*
Total	531	133.8
White	501	139.8
Non-White	30	78.2

*Number per 100,000 estimated population.

As indicated by Chart A, the number of reported cases of cancer increased with increasing age to a peak of 141 cases in the age group 65-74. Fewer cases were reported in the 75-84 and 85-94 age groups possibly because of the smaller population of these ages. A single reported case in the 0-5 age group has not been included on the graph. The case was white, female, six months old and was diagnosed as hemangio endothelioma of the left eye orbit. Diagnosis was confirmed by biopsy.

CHART A

Reported Cases of Malignancy, by Age
August 15, 1947-October 14, 1947
Oklahoma



Of the 541 reported cases of cancer, 531 were residents of Oklahoma. A large percentage of the counties of the state were represented in the reports. No residents of the following counties were included: Beaver, Choctaw, Cimarron, Cotton, Harper, Pushmataha, Stephens, and Woods.

The indications of the two-month period, then, are as follows. The most frequent anatomical sites of cancer were the digestive organs and peritoneum and the skin. For the female population only, cancer of the uterus and of the breast were most frequent. Incidence of cancer was greater among whites than among non-whites and among females than among males. However, certain types of cancer, notably respiratory, were much more prevalent among males. And the age group with greatest number of reported cases of cancer was 65-74 years.

1948 DUES ARE NOW PAYABLE

GARVIN COUNTY FIRST

Garvin County Medical Society nosed ahead in sending in 1948 membership dues with 100 per cent renewal of old memberships and one new member. Woods county was the first county to send in membership dues in 1947.

PUBLIC HEALTH CONFERENCE IS HELD IN DECEMBER

The annual conference of the Oklahoma Public Health Association, an organization representing official and non-official public health agencies in the state, was held in Oklahoma City December 8 and 9.

G. F. Mathews, M.D., state commissioner of health, served as chairman. Appearing on the program was Paul Champlin, M.D., president of the OSMA, who discussed "Public Health and Preventive Medicine as an Integral Part of the Practice of Medicine."

Other Oklahomans appearing on the program were Charles A. Smith, M.D., assistant professor of neuropsychiatry at the Oklahoma University School of Medicine and consultant for the division of mental hygiene of the state department of health, who spoke on "Mental Hygiene in the State Health Program." L. Stanley Sell, M.D., Oklahoma City, discussed "Preventive Aspects of Congenital Defects," which was the concluding lecture of the first day.

Following the general assembly, the group divided into sectional meetings for health officers, sanitarians, clerks, nurses and public health assistants.

1947 STUDENT NURSE TOTAL TOPS PREVIOUS RECORDS

Enrollment of approximately 40,000 new student nurses in the nation's 1,227 schools of nursing during 1947, a peacetime record, was indicated at a meeting of the 1947 Student Nurse Recruitment Committee. This figure was estimated by representatives of the National Committee on Careers in Nursing, American Red Cross, Advertising Council, American Medical Association, American College of Surgeons and the American Hospital Association. Goal for the 1948 campaign will be 50,000 new nursing students, the committee announced. Proposed advertising layouts, copy and other materials have already been prepared.

The Women's Auxiliary of the American Medical Association has again pledged active assistance for the 1948 nurse recruitment campaign. Other civic and health organizations such as Rotary International, the American Dental Association, the National Tuberculosis Association, the General Federation of Women's Clubs and the American Legion also assist in nurse recruitment activities.

SOCIETY VOTES FOR HOSPITAL

A resolution in favor of an Okfuskee county hospital was passed in a meeting of the country medical association at a recent meeting in Henryetta. In line with the hospital program, Reynolds Harjo post of the American Legion also named a committee to meet with other civic clubs to discuss the project. Other meetings are scheduled soon to decide what can be done about sponsoring a community hospital as the government is offering to provide money to cover one-third of the cost of the hospital.

COUNTY OFFICERS NAMED

Several county medical societies have recently elected new officers. Among those whose new officers' names were learned in time for the Journal deadline date are the following:

Caddo-Grady, L. E. Wood, M.D., Chickasha, president; Wesley W. Davis, M.D., Chickasha, secretary; Jackson, J. M. Allgood, M.D., Altus, president; J. Harold Abernathy, M.D., Altus, secretary; Muskogee-Sequoyah-Wagoner, George L. Kaiser, M.D., Muskogee, president; Eugene M. Henry, M.D., Muskogee, secretary; Okmulgee, J. C. Matheny, M.D., Okmulgee, president; S. B. Leslie, Jr., M.D., Okmulgee, secretary; Pontotoc-Murray, W. T. Gill, M.D., Ada, president; Ollie McBride, M.D., Ada, secretary; Pottawatomie, Jack W. Baxter, M.D., Shawnee, president; F. C. Gallaher, M.D., Shawnee, secretary; Tulsa, Victor K. Allen, M.D., Tulsa, president; John G. Matt, M.D., Tulsa, secretary; Woods, R. A. Whiteneck, M.D., Waynoka, president; W. F. LaFon, M.D., Alva, secretary; Kay, Glenn Kregar, M.D., Muskogee, president; E. C. Mohler, M.D., Ponca City, secretary.

NEW McALESTER MEDICAL ARTS BUILDING OPENED

Eighty rooms are incorporated into the floor plan divided into offices for seven doctors, a dentist and laboratories in the new McAlester Medical Arts building recently opened.

The new fireproof building has colors of soft yellow and eye rest green predominating. Soundproof ceilings are features of the structure, and there is fluorescent lighting throughout; the floors are of ceramic tile, of a brown and cream color in the halls and reception rooms and part of the offices. Other offices have a floor covering with green predominating.

Both floors of the building have ground floor entrances. An elaborate heating and cooling system has been built into the structure. Hot water from the powerful gas heating unit, passes through coils, heating air that is forced through a duct circulating system; in the summertime, refrigerated air is forced through the system for cooling purposes. Ninety-five per cent of the equipment in the building is new.

MANGUM HOSPITAL INSPECTED

Headed by Dr. Harold M. Graves, president, an official delegation from the Oklahoma Baptist convention has been inspecting the community hospital at Mangum to pass on a local committee's proposal that the institution be revived and operated at a Baptist hospital. The total cost of equipping and renovating the hospital was estimated at \$100,000, which would include acquiring and furnishing a nurses home.

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When properly administered, Privine hydrochloride induces prolonged vasoconstriction with relative freedom from local or general side effects. Three drops will usually produce nasal decongestion lasting 3-6 hours. Overdosage should be avoided.

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0.1%, bottles of 16 fl. ozs. only

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MEDICAL SCHOOL

OBITUARIES

CALENDAR — JANUARY, 1948

SURGICAL PATHOLOGIC CONFERENCES — Each Tuesday 11:00 A.M. to 12:00 Noon.

MEDICAL CONFERENCES — Each Wednesday 9:00 A.M. to 10:00 A.M.

CLINICAL PATHOLOGIC CONFERENCES — Each Thursday 11:00 A.M. to 12:00 Noon.

TUMOR CLINICS AND CONFERENCES — First and Third Tuesdays (January 6 and 20) 8:00 A.M. to 9:00 A.M.

UROLOGICAL PATHOLOGIC CONFERENCE—Second Tuesday (January 13) 8:00 A.M. to 9:00 A.M.

MONTHLY STAFF MEETING — Second Friday (January 9) Dinner, 6:15 P.M.

RADIOLOGIC CONFERENCE — Fourth Monday (January 26) 6:45 P.M. to 7:30 P.M.

C. H. Dillingham (Med '45), who is on recruiting duty with the navy in Jacksonville, Florida, was a recent visitor at the Medical School.

C. Riley Strong, (Med '42), and F. W. Hollingsworth, (Med '44) are associates in practice with Drs. J. T. and Malcom Phelps in El Reno, Oklahoma.

Col. Vinnie H. Jeffress, (Med '30), stationed at Beaumont General Hospital in El Paso, Texas, has been taking a special course in anatomy at University of Oklahoma School of Medicine. Upon completion of this two months course, Dr. Jeffress will return to Beaumont.

Safety First, (Med '43), has been appointed Research Fellow in Internal Medicine at the University Hospital, Oklahoma City.

OB COURSE ATTENDANCE GOOD AT SCHOOL OF MEDICINE

Thirty-six physicians from throughout Oklahoma, whose years of practice range from a few months to 47 years, attended the second postgraduate course designed for physicians in general practice and held at the school of medicine and University Hospital in Oklahoma City December 8 to 12.

The physicians came from 21 counties to attend the course in obstetrics. Attendance ranged from representatives from Ellis on the west, LeFlore on the east, Woods and Osage on the north and Cotton and Bryan on the south. Thirty of them attended the entire course.

The course, dealing with obstetrical problems encountered in general practice, was under the direction of James B. Eskridge, Jr., M.D., chairman of the department of obstetrics, University of Oklahoma School of Medicine. Henry Buxbaum, M.D., professor of obstetrics and gynecology, Northwestern university medical school, Chicago, was the visiting lecturer for the first

Roy Emanuel, M.D. 1900-1947

Roy Emanuel, M.D., Chickasha physician, was killed in an airplane crash near Chickasha December 6. Mrs. Emanuel and two other passengers in the private plane owned by the doctor were also killed in the crash.

Dr. Emanuel, a graduate of the University of Oklahoma School of Medicine, had practiced medicine in Chickasha for approximately 20 years. He had been active in alumni affairs and was one of the organizers of the alumni program in connection with the Oklahoma Medical Research Foundation. He specialized in pediatrics.

Dr. and Mrs. Emanuel are survived by two children, Darwin, 16, a senior in Chickasha highschool, and a daughter, Marjorie Emanuel Nash, a student at the University of Oklahoma, Norman.

Howard A. Calvert, M.D. 1889-1947

Howard A. Calvert, 58, Frederick, died November 27 of a heart disease.

Dr. Calvert was born near Plattsburg, Mo., April 9, 1889, and attended Clayton university at Omaha, Neb., where he received his bachelor's degree in 1919. He first entered the practice of medicine near Easton, Mo., and later at Springfield.

At the outbreak of World War I he enlisted and was commissioned a lieutenant in the medical corps. Following the war, he went to Chickasha where he remained for eight years and aided in the establishment of the Chickasha General hospital. In 1936 he moved to Walters and in 1942 moved to Frederick where he joined the Frederick Clinic hospital.

Dr. Calvert is survived by his widow, Mrs. Lena Shull Calvert, two daughters, Mrs. Lorraine Francis of Oklahoma City and Mrs. Helen Rose of Miami, Fla., and three granddaughters.

He was a member of the Christian church, the John S. Kerr post of the American Legion and other civic organizations.

two days. J. Robert Willson, M.D., professor of obstetrics and gynecology, Temple university school of medicine, Philadelphia, Pa., was the next lecturer, and C. O. McCormick, M.D., professor of obstetrics, Indiana university school of medicine, Indianapolis, lectured two days.

Pediatrics was the first postgraduate course offered and this course was given in September under the direction of Clark H. Hall, M.D., chairman of the department of pediatrics at the medical school. Joseph A. Johnston, M.D., Henry Ford hospital, Detroit, was guest lecturer. Members of the faculty of the school of medicine also delivered several lectures for both courses.

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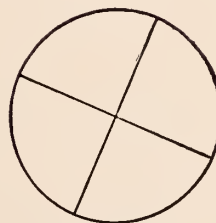
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¹Harris, S. C.; Ivy, A. C., and Searle, L. M.: THE MECHANISM OF AMPHETAMINE-INDUCED LOSS OF WEIGHT: A Consideration of the Theory of Hunger and Appetite, J.A.M.A. 134:1468 (Aug. 23) 1947.

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ANNOUNCEMENTS

CHICAGO CONFERENCE SLATED

The Chicago Medical Society will hold its Fourth Annual Clinical Conference at the Palmer House, Chicago, March 2, 3, 4, and 5, 1948, and has invited all physicians to attend the four-day intensive postgraduate course for the general practitioner and specialist.

The morning and afternoon lectures, the panel discussions, the clinicopathologic conference and the round table discussions each noon will cover newer methods of diagnosis and treatment which will be of interest to all physicians.

PLANS MADE FOR MEETING OF AMERICAN HOSPITAL ASSOCIATION

Plans were laid at the meeting in New York City December 8 for the 50th anniversary convention of the American Hospital Association, to be held in Atlantic City September 20-24, 1948.

More commercial and educational exhibits than ever before will offer the newest in health care equipments and techniques, and dramatize hospital progress and futures. Many valuable and informative events are planned for administrators, trustees and department heads attending.

EXAMINATION DATES SET FOR OBS-GYN BOARD

The next written examination and review of case histories for all candidates for the American Board of Obstetrics and Gynecology will be held in various cities of the United States and Canada on Friday, February 6, 1948.

Candidates who successfully complete the Part One examination proceed automatically to the Part Two examination to be held May 16-22 in Washington, D. C. Notice of the time and place of both examinations will be sent all candidates well in advance of the examination date and for further information and application blanks address: Paul Titus, M.D., Secretary, 1015 Highland Building, Pittsburgh, Pa.

ENDOCRINOLOGY POSTGRADUATE COURSE TO BE HELD SOON

Henry H. Turner, M.D., associate professor of medicine at the University of Oklahoma school of medicine will be one of the guest speakers making up the faculty for the forthcoming Endocrine Postgraduate Assembly to be held in Los Angeles February 23-28, 1948, under the auspices of the Association for the Study of Internal Secretions and the Journals *Endocrinology* and *Clinical Endocrinology*.

The course will be of interest and value to the general practitioner and specialist alike and will consist of lectures, clinics and demonstrations. Additional information concerning this postgraduate course is given in an ad which appears in this month's issue of the Journal.

CONFERENCE SLATED ON POLIOMYELITIS

The National Foundation for Infantile Paralysis has announced that it will sponsor the first international poliomyelitis conference at the Waldorf-Astoria Hotel, New York, July 12-17.

The Department of State has been requested to transmit invitations to more than 60 foreign governments to send official delegates to the conference. These officials will be asked to present summarizations of the problems of poliomyelitis in their countries at a special session. The program will include scientific and technical papers on research and treatment of poliomyelitis to be presented by professional authorities in the field from this country and abroad. In addition, there will be panel discussions on the various subjects.

FIRST OF SERIES MEETINGS SLATED

The first of six sectional meetings in 1948 for Fellows of the American College of Surgeons, the medical profession at large and hospital personnel will be held at Oklahoma City, January 30 and 31. The showing of medical motion pictures will begin each day's program, and there will also be luncheon meetings each day and a dinner meeting the first evening followed by a symposium on cancer.

CLASSIFIED ADS

FOR SALE: Castle 669 autoclave sterilizer, double door metal ivory tan cabinet, glass windows and glass shelves. Used slightly, good condition. Can assure an economical saving. Write Key R, care of the Journal.

FOR SALE: 25 bed hospital in county seat town of 5,000. Possession on closing. Practice well established. Write No. 261, care of the Journal.

FOR SALE. Hospital. 16 beds. 5 bassinets and nurses' home, 8 rooms. Population 20,000. Write Key L, care of the Journal.

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WANTED. Nurse anesthetist who can give open ether anesthesia for major surgery. Apply to W. K. Walker, M.D., c/o Talley Hospital, 501 N. 4th St., Phone 9, Marlow, Okla.

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The Association For The Study of Internal Secretions Announces A Postgraduate Assembly In ENDOCRINOLOGY

Los Angeles, California — Biltmore Hotel — February 23-28, 1948

The faculty will consist of prominent researchers and clinical endocrinologists in the various branches of the medical sciences, gathered from the United States and Canada and will include the following:

Dr. Edwin B. Astwood
Research Professor of Medicine
Tufts College

Dr. J. S. L. Browne
Professor of Medicine
McGill University

Dr. Earl Engle
Professor of Anatomy
Columbia University

Dr. Frederick Fluhmann, Assoc. Professor
Obstetrics and Gynecology
Stanford University

Dr. Edward Hamblen, Assoc. Professor
Obstetrics and Gynecology
Duke University

Dr. Roy G. Hoskins, Director
Neuro-endocrine Research
McCormick Foundation
Boston, Massachusetts

Dr. Hans Lisser
Clinical Professor of Medicine
University of California

Dr. C. N. H. Long
Dean and Professor of Medicine
Yale University

Dr. Cyril M. MacBryde
Assistant Professor of Medicine
Washington University

Dr. E. Perry McCullagh, Chief
Department of Endocrinology and Metabolism
Cleveland Clinic

Dr. James H. Means
Jackson Professor of Clinical Medicine
Harvard University

Dr. Warren O. Nelson
Professor of Anatomy
Wayne University

Dr. Edward Rynearson, Member
Section on Endocrinology and Metabolism
Mayo Clinic

Dr. Hans Selye
Professor of Experimental Medicine
University of Montreal

Dr. E. Kost Shelton
Director of Shelton Clinic
Los Angeles, California

Dr. M. H. Soley
Professor of Medicine and Assistant Dean
University of California

Dr. Willard O. Thompson
Clinical Professor of Medicine
University of Chicago

Dr. George Thorn
Hershey Professor of Physics
Harvard Medical School

Dr. Henry Turner
Associate Professor of Medicine
University of Oklahoma

Dr. Stafford Warren
Dean, School of Medicine
University of California at Los Angeles

Dr. Howard West
Professor of Medicine
University of Southern California

It is the intent of the Committee that this course be a practical one of interest and value to the general practitioner and specialist alike. The course will consist of lectures, clinics and demonstrations. Clinics and demonstrations will be held at Los Angeles County Hospital.

A fee of \$100.00 will be charged for the entire course and the attendance will be limited to 100. Registration will be in the order of checks received and will close on February 1, 1948. Should there be insufficient number of applicants to fill the course, the registration fee will be immediately refunded in its full amount.

Please make your application together with your check, payable to The Association for the Study of Internal Secretions, and forward to Dr. E. Kost Shelton, Chairman of the Post-Graduate Committee, 921 Westwood Blvd., Los Angeles, California, before February 1, 1948. Applicants should make reservations with hotels of their own choice or contact Dr. E. Kost Shelton.

BOOK REVIEWS

FUNDAMENTALS OF PSYCHIATRY. Edward A. Strecker, M.D. Price \$4.00. Philadelphia: J. B. Lippincott Company, 1947. Fourth edition.

This book is written for the average physician and surgeon in active practice, as well as for the medical student who is starting his work in psychiatry. It is elementary, well-organized, and develops the best in psychiatric thinking from ancient time up to the present. As such, the book is highly recommended.

The book is simply and clearly written. Technical language is avoided when possible, what psychiatric terms are used, are clearly explained. In general, the reviewer finds himself in accord with what is written. No criticism of a serious sort is indicated. The reviewer is of the opinion that more time could have been devoted to a deeper dynamic interpretation of the psycho-neurosis, with emphasis on therapy and not so much time spent on classification. However, since the author's idea was to present an overall introduction to psychiatry and an understanding of all of its various branches, this is a very minor criticism.

The author starts with a very brief historical background to psychiatry and brings it up to the present time. The author stresses the close inter-relation between psychiatry and the other branches of medicine and surgery. A plea is made for more complete history taking, stressing the psychic side of the patient's development, as well as for a more thorough understanding of the past and family history.

An attempt has been made to explain the present classification that is now in use, as well as to show its shortcomings. The author then presents a classification used in the army which attempts to incorporate more of the etiological background than our previous classification.

The rest of the book presents a brief but concentrated resume of the various psychiatric disorders, beginning with organic, and going through the toxic and functional, associated with this are very excellent histories to illustrate. In the section of the psycho-neurosis the author has gone into the underlying dynamics of symptoms formation briefly and presented some very excellent examples.

The remainder of the book goes into the development of psychosomatic medicine and again stresses the need for the physician and the surgeon to work in close harmony with the psychiatrist.

The book closes with some brief but well-founded suggestions for improvements in psychiatric teaching in the nursing schools, as well as an early introduction to the psychiatry for medical students.

This reviewer feels that this book is very worthwhile and would be extremely valuable as a guide for physician and medical student alike.—Charles E. Leonard, M.D.

PRACTICAL CHILD GUIDANCE AND MENTAL HYGIENE. Samuel Kach, M.D., Ph.D., Grace Kirsten, A.B., and May Elish March, A.M., M.A. 275 pages. Price \$4.00. Meador Publishing Company, Boston, 1947.

In this fast-going, mechanistic, cocentric, cockeyed world, the child needs sane guidance as never before. Fortunately, the authors of this valuable book have sensed this need and have manifested a keen appreciation of its broad implications.

The true impact of this valuable book is found in the first two paragraphs in the introduction.

"This book on Child Guidance and Mental Hygiene in Question and Answer form is intended for parents, potential parents, educators, social workers, physicians,

lawyers, ministers, executives, institutional workers, and all others interested in the development of normal, wholesome individuals of good personality and fine character.

"The future of every individual begins in the home. Parents who for many years have understood and practiced good Child Guidance in the home are directly responsible for the happiness and success of their children and for their development as patriotic and useful citizens. Should parents fail to understand or fail to practice these principles, the probabilities are that courts and jails, hospitals and sickness, inefficiency or unhappiness will result."

In 24 chapters with well chosen titles the authors pose 260 pages of questions with comprehensive answers. Each chapter opens with a logical discussion of the subject upon which the questions hinge. The introduction to the book and the opening remarks accompanying each chapter place the chief responsibility squarely upon the shoulders of the parents where it rightfully belongs. Naturally, many of the questions and answers are not applicable to all the parents, teachers and agencies having to do with the child's development but no one who is interested can read the book without finding help.

The difficulties faced by the authors can be fully appreciated only when the reader considers a cross-section of American society with its heterogeneous intellectual, moral, social and economic cut surface. Wisely, the difficulties are implied in the opening request that readers send to the authors any unanswered questions which may arise. All physicians and particularly pediatricians with the future of their country at heart should familiarize themselves with this book and be ready to recommend it to the parents of their patients, to nurses, governesses, teachers and agencies interested in child welfare.—Lewis J. Moorman, M.D.

MEDICAL ABSTRACTS

REPAIR OF MAJOR FACIAL INJURIES. James Barrett Brown, M.D., and Bradford Cannon, M.D. *Annals of Surgery*, 126:4:624-632. (October) 1947.

Doctors who are seeing highway accident cases or who are called upon to treat traumatic injuries of the face will be greatly benefited in reading this article. The article is concise but full of very practical and important information; it is well illustrated.

The following quotations are illustrative and should stimulate the reader to read the full article:

"The surgeon like the tailor can make no better coat than his cloth and it is well to realize limitations as well as possible in attempting major repairs.

"One often has to hold in abeyance rules that are promulgated for general usage over the body — such as cutting debridement or packing all wounds open.

"It has been firmly established that if badly lacerated faces can be restored promptly — that the one single operative procedure can often effect an excellent result.

"Pressure dressings on the face — especially in fresh injuries, are as important as any place in the body.

"The normal face among other things, needs protection of the eyeballs, a nose to breathe thru and a mouth to allow normal eating. The elements should guide the approach to the problem of repair of the badly injured face and in the mess of the acute injury such basic philosophy of treatment should not be lost sight of in the face of all the technical details."—J.F.B.

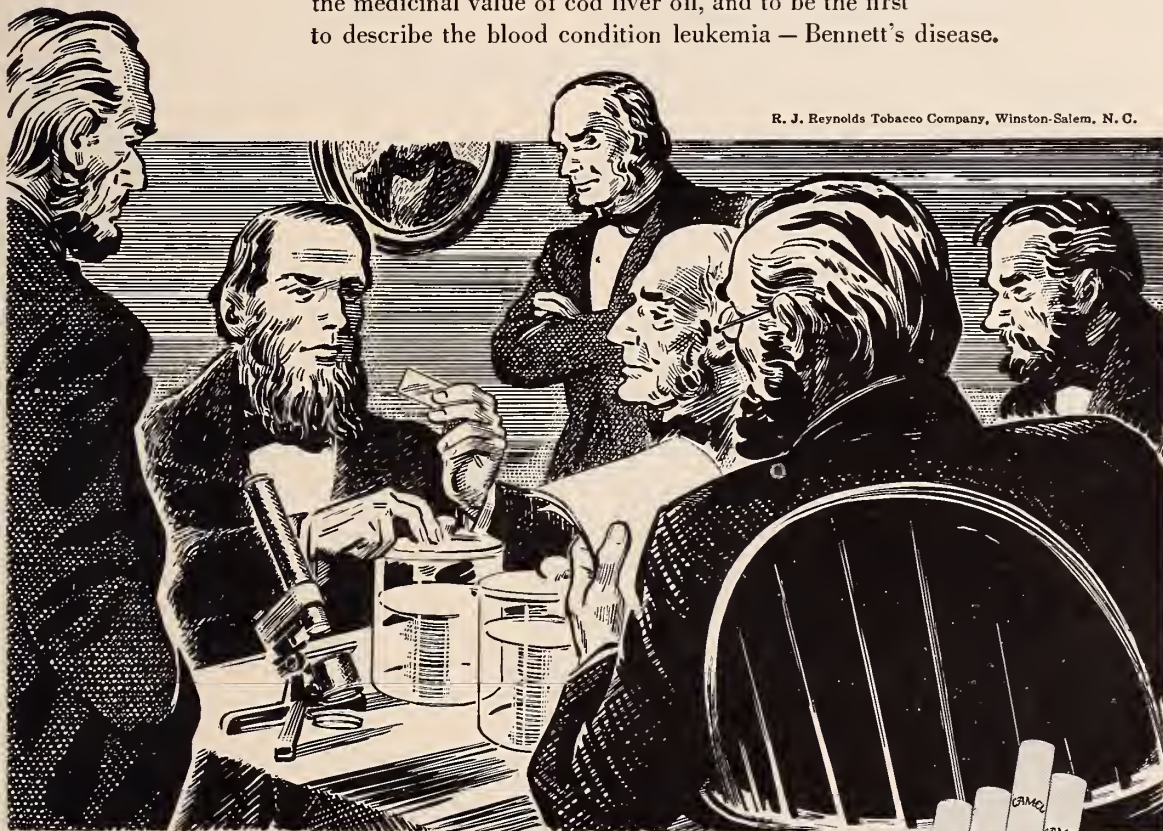
KEY TO ABSTRACTORS

J.F.B. John F. Burton, M.D.

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HAVE YOU HEARD?

The offices of the Oklahoma Medical Research Foundation have been moved from the basement of the ninth floor (924) of the Commerce Exchange Building, Oklahoma City, which literally proves again that wise slogan of progress — "to work upward, you must start at the bottom."

Port Johnson, M.D., Muskogee, recently spoke before two groups. He addressed the Arkansas Medical Society at Fayetteville on "Backache and Sciatica" and he also spoke before the Muskogee County Medical society on "Injuries and Diseases of the Temporal Mandibular Joint." Dr. Johnson came to Muskogee, where he is associated in orthopedic surgery, in July, after being in the orthopedic surgery department of the University of Oklahoma School of Medicine.

Evans E. Talley, M.D., Enid, spoke to the Enid Rotary club recently with "That More May Live Longer," the story of the Oklahoma Medical Research Foundation, as his topic.

W. J. Campbell, M.D., Tulsa, announces the opening of offices for the practice of ophthalmology at 3505 South Peoria.

A. R. Stough, M.D., McAlester, was elected thrice illustrious master at the annual election of officers of Union council No. three of the North McAlester Masonic bodies.

Three members of the O.S.M.A. were speakers before a Parent-Teacher association meeting held in the University laboratories in Norman recently. *Moorman Prosser, M.D.*, *James O. Hood, M.D.*, director of the student health center at the university, and *Ben H. Nicholson, M.D.*, Oklahoma City, were the guest speakers.

C. Riley Strong, M.D., El Reno, attended a course in therapy of infantile paralysis sponsored by the National Foundation of Infantile paralysis.

J. M. Cameron, M.D., Ponca City, discussed "Tuberculosis" for the department of world affairs of the Ponca City Woman's club at a recent meeting. A question and answer period followed his speech.

O. W. Starr, M.D., Drumnright, has returned from Chicago where he has been taking a postgraduate course in eye, ear, nose and throat work. The course will resume following the holiday season.

George W. Conover, M.D., Anadarko, attended a special school of instruction for infantile paralysis at Summerdale, Pa., during part of November and December.

L. C. Kaykendall, M.D., and *Louis Dakil, M.D.*, McAlester, were two of the speakers on "Your Child and His Physical Health" at the November meeting of the McAlester junior highschool Parent-Teachers' association.

E. L. Kirby, M.D., Cherokee, told members of the Rotary club of his city "The best cure for cancer is to avoid getting it in the first place," when he addressed the civic group about cancer. *C. E. Cook, M.D.*, Cherokee, was accepted as a new member of the club at the same meeting.



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25 YEARS AGO

(From Editorial Notes —

Personal and General, January, 1923)

Drs. L. S. Willour and T. H. McCarley, McAlester, announce the dissolution of their partnership, effective January 1.

Dr. C. S. Summers, Tulsa, addressed the Civitan Club of his city December 12. The subject being "The Mental Capacities of the Human Race."

Dr. C. E. Barker, Oklahoma City, was held up and robbed while answering a call December 18. He lost \$150 in cash, a Masonic emblem, and a diamond stud. One of the robbers knocked him in the head rendering him unconscious.

Dr. L. A. Mitchell, Frederick, was elected Commander of his American Legion post in December.

Dr. Walter Hardy, Ardmore, has filed suit against Carter County for more than \$17,000, alleging that to be due him for treating County patients.

Pontotoc County Medical Society was entertained with an oyster supper by the President, Dr. Sam McKeel, Ada, January 2. The mental tabulum was offered by Dr. M. L. Lewis who read a paper on Disease of the Stomach.

CHILDREN ARE INOCULATED

Approximately 1,500 Enid elementary grade children have been inoculated for diphtheria and whooping cough by groups of the Garfield County Medical Society. It was the first in a series planned by the medical society to immunize all children of school age and pre-school age against infections and contagious diseases. The state health department is cooperating with the county society and furnishing the serum for inoculation.

MEET OUR CONTRIBUTORS

(Continued from Page 21)

Everett B. Neff, M.D., F.A.C.S., Oklahoma City, was the co-author of "Surgical Treatment of Peptic Ulcer with a Preliminary Report on Vagotomy." Dr. Neff was graduated from the University of Oklahoma in 1936 and specializes in general surgery. He is also a member of the American College of Surgeons.

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Medical Director
Box 3028, South Austin 13, Texas

At a recent meeting of the El Reno Kiwanis club, *C. Riley Strong, M.D.*, spoke to the group on phases of his training at the D. T. Watson Home for Crippled Children at Pittsburgh, Pa.

E. Haskell Fite, M.D., Muskogee, was elected president of staff officers of the Oklahoma Baptist hospital for 1948. *S. E. Johnson, M.D.*, was elected vice-president and *Jack Horn, M.D.*, was elected secretary. Elected to the executive committee were *H. T. Ballantine, M.D.*, *Perry Hewitt, M.D.*, *Port Johnson, M.D.*

E. J. Allgood, M.D., formerly of Lawton, has joined his brother, *J. M. Allgood, M.D.*, at Altus in his clinic.

Charles Rountree, M.D., was the principal speaker at the annual meeting of the Woods-Alfalfa county medical society in December.

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Superintendent

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OFFICERS OF COUNTY SOCIETIES, 1947

COUNTY	PRESIDENT	SECRETARY	MEETING TIME
Alfalfa.....	L. R. Kirby, Cherokee	L. T. Lancaster, Cherokee	Last Tues. each Second Month
Atoka-Bryan-Coal- Johnston.....	J. S. Fulton, Atoka	A. T. Baker, Durant	
Beckham.....	O. C. Standifer, Elk City	J. E. Levick, Elk City	Second Tuesday
Blaine.....	Fred Perry, Okeene	Virginia Curtin, Watonea	Third Thursday
Caddo-Grady.....	L. E. Woods, Chickasha	Wesley W. Davis, Chickasha	Third Thursday
Canadian.....	G. L. Goodman, Yukon	Jack W. Myers, El Reno	Subject to Call
Carter.....	J. M. Gordon, Ardmore	C. D. Cunningham, Ardmore	Second Tuesday
Cherokee.....	P. H. Medearis, Tahlequah	R. K. McIntosh, Jr., Tahlequah	First Tuesday
Choctaw-McCurtain- Pushmataha.....	Reed Wolfe, Hugo	Fred D. Switzer, Hugo	
Cleveland.....	Orville Woodson, Norman	T. A. Ragan, Norman	Thursday nights
Comanche.....	Leslie T. Hamm, Lawton	Byron W. Aycock, Lawton	Third Tuesday
Cotton.....	G. W. Baker, Walters	Mollie Seism, Walters	Third Friday
Craig.....	P. L. Hayes, Vinita	J. M. McMillan, Vinita	
Creek.....	O. H. Cowart, Bristow	F. H. Sisler, Jr., Bristow	Second Tuesday
Custer.....	Wilard H. Smith, Clinton	D. W. McCauley, Clinton	Third Thursday
Garfield.....	Francis M. Duffy, Enid	John R. Walker, Enid	Fourth Thursday
Garvin.....	Thomas F. Gross, Lindsay	John R. Callaway, Pauls Valley	Wed. before 3rd Thur.
Grant.....	I. V. Hardy, Medford	F. P. Robinson, Pond Creek	
Greer.....	Dwight D. Pierson, Mangum	J. B. Hollis, Mangum	
Harmon.....		R. H. Lynch, Hollis	First Wednesday
Haskell.....	Wm. S. Carson, Keota	N. K. Williams, McCurtain	
Hughes.....	Clyde Kernek, Holdenville	H. V. Schaff, Holdenville	First Friday
Jackson.....	J. M. Allgood, Altus	J. Harold Abernathy, Altus	Last Monday
Jefferson.....	J. A. Dilard, Waurika	O. J. Hagg, Waurika	Second Monday
Kay-Noble.....	Glenn Kreger, Tonkawa	E. C. Mohler, Ponca City	Second Thursday
Kingfisher.....	John R. Taylor, Kingfisher	H. Violet Sturgeon, Hennessey	
Kiowa.....	J. Wm. Finch, Hobart	R. F. Shriner, Jr., Hobart	
LeFlore.....	John H. Harvey, Heavener	Rush L. Wright, Poteau	
Lincoln.....	J. S. Rollins, Prague	Ned Burleson, Prague	First Wednesday
Logan.....	James Petty, Guthrie	J. E. Souter, Guthrie	Last Tuesday
Mayes.....	E. H. Werling, Pryor	Paul B. Cameron, Pryor	
McClain.....	I. N. Kolb, Blanchard	W. C. McCurdy, Jr., Purcell	
McIntosh.....	F. R. First, Sr., Checotah	W. A. Tolleson, Eufaula	Third Thursday
Muskogee-Sequoyah- Wagoner.....	George L. Kaiser, Muskogee	Eugene M. Henry, Muskogee	First Tuesday
Northwestern.....	Myron England, Woodward	C. W. Tedrowe, Woodward	2nd Thurs. Even Mo.
Okfuskee.....	L. J. Spickard, Okemah	M. L. Whitney, Okemah	
Oklahoma.....	F. Redding Hood, Oklahoma City	George E. Kimball, Oklahoma City	Fourth Tuesday
		Mrs. Muriel Waller, Exec. Secty.	
Oklmulgee.....	J. C. Matheney, Okmulgee	S. B. Leslie, Jr., Okmulgee	Fourth Tuesday
Osage.....	R. O. Smith, Hominy	Glen W. McDonald, Pawhuska	
Ottawa.....	B. Wright Shelton, Miami	W. Jackson Sayles, Miami	Third Thursday
Payne-Pawnee.....	C. H. Haddox, Pawnee	C. W. Moore, Stillwater	Second Thursday
Pittsburg.....	Homer C. Wheeler, McAlester	Edward D. Greenberger, McAlester	Third Friday
Pontotoc-Murray.....	W. T. Gill, Ada	Ollie McBride, Ada	First Wednesday
Pottawatomie.....	Jack W. Baxter, Shawnee	F. C. Gallaher, Shawnee	1st and 3rd Saturday
Rogers.....	W. A. Howard, Chelsea	P. S. Anderson, Claremore	
Seminole.....	Claude B. Knight, Wewoka	Mack L. Shanholtz, Wewoka	
Stephens.....	E. H. Lindley, Duncan	E. C. Lindley, Duncan	Third Wednesday
Texas.....	Daniel S. Lee, Guymon	E. L. Buford, Guymon	Third Wednesday
Tillman.....	G. A. Tallant, Frederick	O. G. Bacon, Frederick	
Tulsa.....	Victor K. Allen, Tulsa	John G. Matt, Tulsa	Second and Fourth Monday
		Mr. Jack Spears, Exec. Secty.	
Washington Nowata.....	Thomas Wells, Bartlesville	L. B. Word, Bartlesville	
Washita.....	A. H. Bungardt, Cordell	Aubrey E. Stowers, Sentinel	Second Wednesday
Woods.....	R. A. Whiteneck, Wynoka	W. F. LaFon, Alva	Last Tuesday Odd Months

COUNCILORS AND VICE-COUNCILORS

(Figure indicate year terms expire.)

District No. 1: Alfalfa, Beaver, Cimarron, Dewey, Ellis, Harper, Texas, Woods, Woodward—Daniel B. Ensor, M.D., Hopeton (C) 1950; O. C. Newman, M.D., Shattuck (V-C) 1950.

District No. 2: Beckham, Custer, Greer, Harmon, Jackson, Kiowa, Roger Mills, Tillman, Washita—L. G. Livingston, M.D., Cordell (C) 1948; O. C. Standifer, M.D., Elk City (V-C) 1950.

District No. 3: Garfield, Grant, Kay Noble, Pawnee, Payne—Bruce Hinson, M.D., Enid (C) 1950; R. W. Choise, M.D., Wakita (V-C) 1950.

District No. 4: Blaine, Canadian, Cleveland, Kingfisher, Logan, Oklahoma—Carroll Pounds, M.D., Oklahoma City (C) 1950; Joe Phelps, M.D., El Reno (V-C) 1950.

District No. 5: Caddo, Carter, Comanche, Cotton, Grady, Jefferson, Love, Stephens—J. L. Patterson, M.D., Duncan (C)

1948; J. Hobson Veazey, M.D., Ardmore (V-C) 1950.

District No. 6: Creek, Nowata, Osage, Rogers, Tulsa, Washington—Ralph McGill, M.D., Tulsa (C) 1949; Ralph Rucker, M.D., Bartlesville (V-C) 1950.

District No. 7: Garvin, Hughes, Lincoln, McClain, Murray, Okfuskee, Pontotoc, Pottawatomie, Seminole—Clinton Gallaher, M.D., Shawnee (C) 1950; Ned Burleson, M.D., Prague (V-C) 1950.

District No. 8: Adair, Cherokee, Craig, Delaware, Mayes, Muskogee, Okmulgee, Ottawa, Sequoyah, Wagoner—J. C. Edwards, M.D., Okmulgee (C) 1948; W. J. Sayles, M.D., (VC) 1950.

District No. 9: Haskell, Latimer, LeFlore, McIntosh, Pittsburg—Earl Woodson, M.D., Poteau (C) 1948; E. H. Shuller, M.D., McAlester (V-C) 1950.

District No. 10: Atoka, Bryan, Choctaw, Coal, Johnston, Marshall, McCurtain, Pushmataha—W. K. Haynie, M.D., Durant (C) 1950; W. W. Cotton, M.D., Atoka (V-C) 1950.

THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

FOR EXAMPLE, TAKE TEXHOMA

A fine piece of pioneering in the Panhandle secures physicians and makes medical care available!

Through community cooperation, including a bond issue of \$30,000.00, modern facilities for scientific medical practice have been provided and the physician is on the job — Texhoma has turned the trick.

Our press clipping service indicates that other rural communities in Oklahoma are beginning to realize that the well-trained physician cannot afford to locate where facilities for up-to-date scientific diagnosis and medical care are not available and that he cannot afford to take the responsibility of practicing without them. As a rule, it is easy to raise money for material civic improvements or to attract new industries. Why not put up some cash to safeguard community health and to meet individual medical needs?

Unfortunately, the answer to this question is a lack of knowledge on the part of the public and in the last analysis the responsibility rests upon the shoulders of the medical profession. If our patient-physician contacts and public relations had been what they should, people would know why they cannot secure and keep competent physicians and they would gladly provide facilities. We doff our hats to the forward-looking citizens of Texhoma and bow our heads in shame for not doing more to bring about such enlightened community understanding throughout the land.

The young man now on the job at Texhoma is a wide-awake graduate of the University of Oklahoma School of Medicine who considers this community made set-up an opportunity to render scientific services to well deserving people otherwise without medical care.

If socialized medicine comes, the medical profession must bear much of the blame.

GERIATRIC GYRATIONS

Of all the good citizens of Oklahoma, physicians should know the inherent evils of government paternalism. Particularly should they know the danger of pyramiding an idle, purposeless old age group to serve as a living example of "man's inhumanity to man." There is nothing more annulling than the implications of a bureaucratic pension at 65 years of age. "Here is your living; society is literally through with you, as indicated by this check; though the bureaucrats are glad to have you on their rolls, you are a charge upon the cringing taxpayers; take this and eke out your existence as best you can." All mature men and women know that the world salutes courage and self sufficiency and that God never intended that this spark of divinity should be snuffed out at 65.

In Shakespeare's day it was safe to say "There is a destiny." But now, owing to organized tampering with man's otherwise manifest future, the government tries to shape his ends. Instead of a merciful discriminating providence dispensing according to merit and need the old must look to a cold, impersonal bureau supported by a sales tax.

The physicians of the state should inform themselves with reference to the two proposed referendum petitions providing for sufficient additional sales taxes to place practically every person reaching the age of 65 on an old age pension.

The man who doesn't want to make his own living after 65 is not worth the salt required to savor his bread; the man or woman who is not able to make his living at 65 is either suffering from disease or premature senescence and he should be cared for by the members of his own family; the man or woman sick and indigent without family or friends to succor him should be sustained by local charity.

It is unreasonable to encourage people to give up at 65. It is unthinkable that in this pioneering young state, they should be willing to lay down the shovel and hoe and accept a dole. Individual dominance over old age is as stimulating as winning at dominoes. But

even in Oklahoma there is a New Deal generation of young people some of whom were conceived by the W.P.A. loafers, supported by "made jobs" and subsidies. For many advanced, even education is free. This young generation is not ready for old age pensions but with no cultivated sense of responsibility they are willing to let the people who must purchase the necessities of life pass across the counter enough extra cash to care for their relatives. The old folks are in the way, they cramp their style, why not let the taxpayers and the retailers worry about them.

The Oklahoma State Chamber of Commerce and the Oklahoma Retail Merchants Association are to be commended for organized efforts to defeat these initiative petitions for more old age pensions.

PSYCHOSOMATIC MEDICINE

Those who glibly talk about psychosomatic medicine as though it were something new and easy do not realize that it is as old as the hills through which humanity has moved toward civilization and that it is dependent upon the spontaneous influence of personality and the reasoned exercise of artistic and scientific perspicuity on the part of the physician.

When the patient comes saying, "Doctor, here I am. I'm sick. Please do something for me," figuratively speaking, he has tossed into the lap of the physician the disarticulated, multifacted psychic and somatic fragments of his being with the hope that he can file the rough edges, fill the worn surfaces and fit the patched parts together with a prescience which will secure harmonious performance in an inharmonious world.

Wise physicians are humble in the presence of their patients and they pray that they may not fumble in the performance of their duty. Consciousness of responsibility for the patient as a composite whole is a sobering experience. Striving for perfection is hopeless insofar as the coveted goal is concerned but it is not without rewards.

In order that the young physician may have a mark at which to aim and a measure which will cause all his previous ideals to seem diminutive, he is referred to Goethe's estimate of Voltaire. Nothing less could bring perfection in the psychosomatic medicine.

"Depth, genius, imagination, taste, reason, sensibility, philosophy, elevation, originality, nature, intellect, fancy, rectitude, facility, flexibility, precision, art abundance, variety, fertility, warmth, magic, charm, grace, force,

an eagle's sweep of vision, vast understanding, rich instruction, excellent tone, urbanity, vivacity, delicacy, correctness, purity, cleanness, elegance, harmony, brilliancy, rapidity, gayety, pathos, sublimity, universality, perfection . . ."

Indeed, behold the great physician.

UNESCO GUIDE

In all matters pertaining to educational, scientific, and cultural movements, the physician should be among the leaders in his community. For his benefit attention is called to an important source of information supplied by the University of Oklahoma Extension Division under the above title.

Under the library loan service the following articles dealing with the "United Nations Education, Scientific, and Cultural Organization" are referred to as follows:

"One hundred selected articles, compiled by Robert L. Cashman, research reader, department of public information, University of Oklahoma, Norman, Oklahoma, May, 1947, as follows:

10—United Nations (general background material).

"10—UNESCO (outstanding articles).

"80—UNESCO (supplementary reading)."

Films on international understanding are also available. If a satisfactory amalgamation of all the distraught nations into "one world" is ever realized, medicine must be among the moving forces which bring it about. Physicians cannot afford to neglect their social, cultural, and political opportunities and obligations. This service which is made available by the Extension Division of the State University should be widely utilized.

Plan Now
To Attend the Annual Meeting
Of the Oklahoma State Medical
Association

Skirvin Hotel
Oklahoma City, Oklahoma
May 17-19, 1948

SCIENTIFIC ARTICLES

WHERE DOES THIS ROAD LEAD?

RAY H. LINDSEY, M.D.

PAULS VALLEY, OKLAHOMA

A subject of such title should properly be discussed by one of more mature years, yet the great need for such discussion leads me to believe the subject will stand for itself, despite the presentation.

The title is directed to the medical profession of our state part as warning, part as prophesy as to where our present course of action seems to lead us. I would ask this assembly two questions, who is now attending the sick of our state, and who will attend them in the future? These questions arose from thought on several lines.

a. The centralization of medicine in the cities and gradual depletion of doctors in rural areas and small towns.

b. The difficulty of creating interest in young doctors to practice in small towns.

c. Overemphasis of specialization in school and hospital training.

d. Overwork and the small number of doctors practicing in small towns.

e. Gradual increase in cults and irregular practitioners during the past few years.

I would like to discuss each of these sub-heads briefly.

The war years created a tremendous problem of civilian care of the sick with the large numbers of doctors called into the services. There was an immediate trend, minor but noticeable, among those left at home to gravitate to the larger towns to specialize in one branch of practice. Medical societies in the larger centers discouraged influx into their ranks, the procurement board did a great amount of good, but despite all such efforts, there was a slow shift which was given force of numbers by the return of veteran doctors, many of whom were not previously established in practice or had barely started. The maximum return of displaced professional personnel for war work has occurred, leaving no supply to fill the empty places in our roster. Dick Graham tells me there are 120

places in this state crying for doctors. Who is caring for their sick? What do those people think when they read our Medical Association advertisements extolling the virtues of a profession which is no longer represented in their ranks?

It is very difficult to create interest in the young doctor to practice in a smaller town. He has spent much of time and money for his training and he feels the more lucrative field is in the city and possibly in specialization. His education has been divided into the special fields for teaching purposes and he finds it difficult to remember, if he ever knew otherwise, that all the men who lectured and demonstrated before his class were not specialists in that particular field. There will always be a good proportion of medical students who are eager and willing to practice general medicine, who do not want to undergo the long years of preparation for specialization, but we must encourage them in their desires. We must make known the need for doctors, show them the many openings where people will beat a path to their doors. In our specialty boards we have neglected to establish a Board of General Practice — we have failed to honor the father of all specialists — the family doctor.¹

Most doctors in small towns are successful. The cost of living, office overhead, etc., are less in comparison and fees are not proportionately less than his city colleague. At present, however, the small town doctor finds himself overworked to the point of keeping unreasonably long hours or drifting gradually into the easy road of asking a few questions and writing a prescription. I do not intend to mock or sneer at the practice of quick diagnosis and prescription because many of these doctors are able and astute clinicians, some are uncannily so. Their ability comes from long association with and knowledge of their patients, plus the known percentage of ills which progress to recovery

regardless of treatment. I defend these doctors for a practice which time and circumstance seem to demand, but as a profession we cannot defend a practice which drives the sick public to a city specialist for a physical examination, or to a cultist for a rub down and a shot of penicillin. This practice alone is a big halting point for the young doctor seeking a location. He knows from interviewing the druggist and seeing the doctor's waiting room that he is buckling competition, but if he visits the doctor and sees this quick method of handling patients, he knows he is bucking the hardest of all competition. He sees none of the facilities he has been taught to use in diagnosis, so he is naturally inclined to seek a place nearer a medical center or a larger town.

The past few years have brought to our state a great increase in the numbers of irregular practitioners. This began soon after our basic science law was passed — and the liberal reciprocity with a northern neighbor was overlooked. Disregarding the cause, they are here, most of them stayed during the war, the army not wanting them as doctors and most draft boards afraid of touching them. These people have built hospitals over the state, they have filled the hills with their boasts and the adjoining towns with their feeder cultists. They do anything in general practice regular doctors can do, give the same drugs, do any minor surgery they can get and hire traveling M.D.'s to do their major surgery. With the decline in numbers of doctors of medicine cults are increasing, they are covering fields untouched or unserved by M.D.'s until the future of such a trend will find us a profession of teachers and specialists and the osteopaths attending the sick. The regular doctor who consults with them or does their surgery is looked down upon now, but should the trend continue it will not be so when the cities begin to spill their disgruntled numbers of M.D.'s to communities the cults control.

May I suggest in a general way a few remedies for these trends?

First, some means of decentralizing medical care must be found. Any further decline in medical coverage in our rural and small town areas will demand drastic measures which may include federal control or acquisition of these areas by the cults. More facilities must be provided for caring for the sick in districts or counties inadequately supplied at present. These facilities will be provided

in the future whether federal, state, county, farm cooperative, individual doctors financing themselves as a group, or the cults. If the facilities are there, you'll have no trouble finding young doctors to staff them.

Next, medical students need be shown more of the art of the practice of medicine and less of its specialization. If workable at all, students could be given clerkships under preceptors for the summer before their senior year in school. There are many good clinicians in our state in smaller cities under whom students could profit greatly. They can learn the ways of small town practice, could better decide their own particular field of endeavor than spending their time watching a broad back and two elbows perform a gastric resection. Let them know that the thrill and benefit from a cure of a mid palmar abscess in a farmer is just as great or greater than the removal of gallstones in the finest of surgeries. I would be proud to have my son serve such a clerkship under Dr. Risser in Blackwell, the Doctors Newman in Shattuck or Dr. G. L. Johnson in Pauls Valley.

Group practice is in part an answer to the small town problem of shortage of doctors. By this arrangement, several doctors can share investment in equipment, office and hospital facilities and general expense. Many strong groups throughout the state continue to serve a large number of sick people and practice good medicine. Their success is not due to their laboratory equipment or other physical property, but to the fact that the association of doctors tends to promote more careful medicine.

As to the cults, I have only a few remarks to our own profession. Let us remind ourselves over and over that the honor and integrity of any group depends on its present members, not the laurels of predecessors. Let us be on the alert to practice continually careful medicine in our ranks. Let us be alert to the pitfalls of snap diagnoses, to the need of careful histories and physical examinations. By these things alone we can do more to uphold our honor and standing than all the advertising in the world. By these things alone we can relieve many of the ills in our ranks that are driving people to the cults and to city specialists for trivial matters.

By these things we will be better doctors and draw among us more and better doctors.

1. Since this article was submitted an Academy of General Practice was set up at the American Medical Association meeting in Atlantic City June 10, 1947.

QUANTITATIVE SEROLOGIC TESTS IN EVALUATION OF SYPHILOTHERAPY*

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The use of the so-called rapid treatment for syphilis has greatly increased the demands for quantitative serologic tests. Following the short intensive treatment now being given, most patients are discharged while the blood is still positive to serological tests. In most cases the blood does not become negative for several months after treatment has been terminated. These patients are instructed to return at regular intervals (usually 30 days) for rechecks. It is in these cases that quantitative tests have the most value.

To use the tests to the best advantage it is advisable to have a clear understanding of them and the proper place for their use or disuse.

Quantitative tests are not new, but their extensive use is quite recent. For years many laboratories have run quantitative Kolmer tests on certain blood sera and most laboratories have performed quantitative or titred tests on all spinal fluids.

TECHNIQUE OF QUANTITATIVE OR TITRED TESTS

All of the standard tests for syphilis can be converted to titred or quantitative tests. To do this simply requires that a series of tests are run on the same specimen. The serum is diluted with saline and six to 10 dilutions (sometimes more) are made for each serum. While various methods for dilution are used, one of the most common is as follows:

	Dilution
1st tube—Patient's serum undiluted..	1/1
2nd tube—Serum plus equal amount salt solution	1/2
3rd tube—Some of contents of tube 2 plus equal amount of salt solution..	1/4
4th tube—Some of contents of tube 3 plus equal amount of salt solution..	1/8
Etc.	

These dilutions are usually carried through 10 tubes. Thus in a 10 tube test the serum in the last tube has been diluted 1/512.

The same test is made on each tube and the "end point" is determined. The "end point" is the last tube that shows a positive reaction. For example, in the quantitative Kahn test, if the fifth tube shows a positive reaction of 2+ or greater and the sixth tube is negative, the fifth tube is the "end point." The results are expressed as positive in dilution 1/16 or reported as 64 Kahn units. The Kahn units are equal to the last positive dilution multiplied by four ($S=4D$). If the first tube is positive, the report is four Kahn units.

This system is the one used in our laboratory and is the one recommended for use in the rapid treatment centers throughout the country.

The Quantitative Kahn test is widely used because it is a flocculation test tube test that can be adapted readily to quantitative techniques. The Kahn test has been used extensively by the army and navy and by many laboratories that do not have sheep cells, guinea pig complement, and other facilities for doing the Kolmer Complement Fixation tests.

The Quantitative Kolmer test is widely used especially for spinal fluid determination. It is the test used on all spinal fluids in our laboratory. This is a nine tube test (six dilutions, three controls) and serial dilutions are made. The results are expressed as the highest dilution showing a positive reaction, or they may be reported as Kolmer units.

The Mazzini Quantitative test is used in some states. The Mazzini antigen is more satisfactory in some respects, but the new cardiolipin antigen should prove more satisfactory and will probably come into use in the future.

The chief difficulties encountered in quantitative tests are the wide variations in the

*Presented before the Section on Medicine of the Oklahoma State Medical Association at the Annual Meeting, May 14, 1947.

composition of different lots of antigen and the rapid change in sensitivity of some antigen after it is prepared for the tests. Cardiolipin antigen should be more uniform because of its chemical reproductibility.

Unfortunately the various tests for syphilis do not follow a uniform system of dilution or the same system of reporting. This use of different antigens and the lack of uniformity of techniques and reporting makes any attempt to convert results from one test to results of another very unsatisfactory. All tests do not react the same to the same serum. It is not possible to convert Kahn units to Kolmer or other titres with any degree of satisfaction.

In general the usual routine tests agree very well, but it is not uncommon for one test to show a positive reaction and another test to be negative on the same serum. Usually these positives are weak positives except in some cases where zone reactions are encountered. For example, we may have a positive by the Kolmer test and a negative Kahn test. Thus, we would have a positive with no Kahn units.

A 2+ reaction in the standard Mazzini test is reported as doubtful while a 2+ Kahn is reported positive and a 1+ Kahn is reported doubtful. A 1+ Kolmer is reported positive.

Time will not permit a long discussion of this point, but we wish to point out that multiple tests do not always agree and it is not a laboratory error if one is positive or doubtful and the other is negative. As previously mentioned, a positive may be reported by a Kolmer or Mazzini test with no Kahn units.

Since there is a rather wide variation in the sensitivity of antigens used for quantitative tests, it can be expected that reports from different laboratories will not be uniform. Let us consider a specimen that shows an "end point" in the eighth tube with one antigen and in the sixth tube with another. Thus the Kahn titres would be 1:128 or 512 units in the first or 1:32 or 128 units in the second.

Because of this variation in antigens it is necessary that the repeated tests all be made by the same laboratory and it is important that the laboratory use the same supply of antigen for as long a period of time as possible. When it becomes necessary for the laboratory to secure a new supply of antigen, it should be matched as nearly as possible to the old.

PSEUDOQUANTITATION

The committee on the serodiagnostic test for syphilis recommends that standard tests

be reported as *positive*, *negative* or *doubtful*. Each author of a test has established standards for each of these designations. However, some laboratories still report by using a number of pluses, such as, 1+, 2+, etc. This may be called pseudoquantitation. These should not be considered as quantitative tests in the light of our present discussion.

These reports may have value for other purposes but should not be confused with the true quantitative tests. For example, a test may be reported 4+ by the standard Kahn test but the units could be any place between four and 2048 units by a 10 tube titred Kahn test. Three plus could show a quantitative titre that is quite high.

TITRES IN RELATION TO DURATION OF DISEASE

Ordinarily serological response to treatment can be anticipated in inverse ratio to the duration of disease at the time of beginning treatment. In primary or early secondary syphilis there is usually an increase in the titre following the beginning of treatment. Following this, a rapidly decreasing titre as a response to treatment is usual. Treatment initiated later in the disease is followed by slower serological response. In infections that have existed for years the response is even slower, conditions approaching the "serological fast" state are encountered.

In the "serological fast" cases, the titres tend to remain fairly constant except for slight fluctuations due to variations in the sensitivity of the test, or slight variation in the patient's blood as a result of diet, time of specimen in relation to meals, ageing of specimen before test, or partial hemolysis. Concurrent infection or elevation of temperature in the patient may cause a marked increase in quantitative titres. Occasionally the titres will rise suddenly and sharply in treated cases with no apparent reason except perhaps a cold or other infection. These usually go down again and are not an indication for renewing treatment. In relapsing cases, or cases of reinfection the titres continue to rise. These changes can best be followed by plotting the curve for each patient on graph paper.

INDICATIONS FOR QUANTITATIVE TESTS

1. Patients taking "rapid treatment."

A quantitative test should be made before starting treatment and a recheck made at least every 30 days until the patient has been definitely established as sero-negative.

2. Primary Syphilis, Darkfield negative.

Quantitative tests are of value in early syphilis with primary lesions in which the *Spirochaeta* cannot be demonstrated. A

marked rise in the titre proves a simple method of identifying such lesions as syphilitic.

A simple positive reaction in the presence of a chancrelike lesion in which no spirochaetes can be found is construed by most physicians as indicative of primary syphilis. Such a reaction is, however, compatible with the diagnosis of a latent syphilitic infection and a coexisting nonsyphilitic lesion, or it may indicate a biologic false positive reaction caused by chancroidal or lymphogranulomatous infection.

A sharply rising titre is usually found in very recently acquired syphilis, a stationary titre indicates a syphilitic infection of some duration, and a falling titre without treatment usually represents a false positive reaction. A considerable proportion of lymphogranulomatous and chancroidal infections have been shown to give false positive reactions for syphilis. Such reactions which are usually of low titre, may persist for several weeks, and mistaken diagnoses of primary syphilis may easily be made in these cases.

3. Congenital Syphilis.

Titred tests in children born of syphilitic mothers are of proven value. Maternal reagin may be transferred from the mother to the child through the placenta. Serologic tests at birth or cord Wassermanns are of little value. Approximately 15 per cent of positive cord tests revert to negative and a similar number of negatives become positive later.

If quantitative tests on the child are made at regular intervals an increase in titre would suggest syphilitic infection. Comparative studies of the mother and child may also be of diagnostic value. The titre in the child is the same or less than the mother. A titre in the infant well above that of the mother should be evidence of syphilis in the child.

4. Relapsing Syphilis.

A consistently rising titre is suggestive of early relapsing syphilis. This should be consistent and an occasional sharp rise should be rechecked before a diagnosis of relapse is made.

5. Reinfection.

In the case of reinfection a sharp and consistent rise in titre can usually be expected.

6. Biologic False Positive Reactions.

The recognition of biologic false positive reactions is often extremely difficult, but one of the simplest aids in their detection is the use of quantitative serologic tests. A rapidly

falling titre in the absence of therapy is evidence of the presence of nonsyphilitic reagin. Even if the serologic reaction does not become completely negative, a decrease of titre or other bizarre behavior should arouse suspicion, and the other recommended procedures for the detection of false positive reactions can then be applied.

CONTRAINDICATIONS FOR QUANTITATIVE TESTS

1. Routine tests for diagnosis or case finding.

Quantitative tests are not indicated for diagnoses. Some physicians and clinics have a habit of requesting quantitative tests on all specimens sent in, including barbers, beauty parlor operators, food handlers, premarital, and pregnancy cases. Apparently the idea is that the quantitative test is a superior type of test. This is not so because most reliable routine tests used are better for these diagnostic cases. In our laboratory our screen test is more sensitive and all positives or doubtfuls are rechecked by at least two and usually three or four different tests. Thus, in general, the regular standard tests are preferable to quantitative tests for diagnosis or case finding.

SUMMARY AND CONCLUSIONS

A brief discussion of quantitative test has been given. The general method of performing and reporting these tests has been outlined and the indications and contraindications for quantitative tests discussed.

In conclusion we would emphasize that one or two tests are of little value. A series of tests and a plotted curve is of great value in following cases that have received treatment. Based on a single test the quantitative titre or units does not indicate the extent of infection. A patient may have a severe or extensive infection with complications and show a low titre. Conversely another patient may have no signs or symptoms and no evidence of extensive syphilitic infection, and still show a high titre by quantitative techniques or a strong positive by the regular standard tests.

It is very important that all tests on the same person be performed by the same laboratory and that the same tests and the same antigen be used throughout.

Laboratories performing quantitative tests should keep a sufficient supply of antigen on hand to last for a long period of time, and new antigen should be checked against the old to avoid sharp breaks in titres due to the change in antigen.

COMMON ERRORS IN DIAGNOSIS OF SYPHILIS*

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Syphilis in its various stages and manifestations has presented a challenge to the diagnostic ability of physicians for centuries. Before serology tests diagnosis was by clinical appearance and physical examination only and diagnostic errors were frequent. Since the advent of the Wasserman and flocculation serological tests a great aid has been rendered in the diagnosis confirmation and discovery of this disease, especially in the secondary and latent stages. However, clinical experience, history and careful examination of patient is of utmost importance. I shall try briefly to give a few of the errors that I think physicians occasionally make; they have been rather forcibly brought to my attention as a consultant in dermatology and syphilology with the Oklahoma State Health Department's rapid treatment center in Oklahoma City, and if you will pardon the personal reference, in my private practice.

FAILURE TO TAKE A GOOD HISTORY

Often syphilis is overlooked by the failure to take a good history. Tact and judgment are required. A demanding attitude usually gets a flat denial. Be soothing and confident in your tone and manner of approach. Many patients will declare they have never had syphilis but will admit taking treatment for "bad blood." Inquire carefully as to history of indolent sores on the genitalia, prolonged sore throats, history of stillbirths or miscarriages, the previous taking of arm and "hip shots," penicillin, etc. Frequently a patient will admit that he has had syphilis to one examiner and when confronted as to why he did not tell a previous physician of this fact, he will pass it off with "Oh, he never asked me" or "I did not think it was important at the time." A good history can tell you a lot about how well or thoroughly a patient has been previously treated. It takes time and effort to get this data but it is certainly worth the effort.

INSUFFICIENT OR LACK OF THOROUGH PHYSICAL EXAMINATION

Example: A patient presents herself or himself to the physician and says: "Doctor, I have a little skin rash on my arms. Can you give me something for it?" It is rather easy to give the dermatitis a casual glance and say "Yes, you have an allergic dermatitis," and write out a prescription for calamine lotion. Whereas if the examiner had spent a little more time, and had the patient disrobe, examined the skin genitalia in a good light, searched for glandular adenopathy and carefully examined mouth, nose and throat; he might have discovered a typical secondary stage of syphilis with mucous patches, generalized glandular adenopathy and condylomata. Often the secondary stage is very transitory, mild erythema only visible in a good light. Often the only evidence of this stage will be peri-anal condylomata. Be suspicious of all genital lesions regardless of patient's denial of sex exposure or social status.

FAILURE TO TAKE CONFIRMATORY LABORATORY TESTS

Primary syphilis is frequently overlooked or mis-diagnosed. In women in the majority of cases the chancre is on the cervix or inner surface of vulva and the patient is frequently unaware of the lesion. In men, too, often because the lesion is not typical or the history unreliable, one is prone to think the lesion is a chancroid, herpes simplex, minor abrasion, or non syphilitic ulceration. Do a dark-field examination on any penile or vulvae lesion and consider the ulceration to be syphilis until proven otherwise. If you do not have a dark-field available send your patient to a reliable laboratory where a dark-field examination can be made. The amount of heart-aches, tragedies and misery that has resulted from treating a lesion as non-syphilitic when it is teeming with Spirochetes and allowing the patient to be dismissed with the statement "This is just a little scratch; here put some of this calomel or sulfa powder on it." Again patients often mislead the doctor.

*Chairman's Address presented before the General Session of the Oklahoma State Medical Association at the Annual Meeting, May 15, 1947.

They will declare repeatedly that they have not been exposed until you have positively proven to them that they have a chancre or syphilis. Example: One patient with a large clinical chancre on shaft of penis, declared repeatedly that it was the result of hooking himself with a hay hook, when in reality he had caught the infection in a haystack but not from a hay hook. The male negro so frequently says "Doctor, it's just a 'hair cut' and I didn't think it amounted to anything." Extra-genital chancres are frequently treated as paronychia, bone felons and any variety of infections until the serology becomes positive or the patient develops signs of secondary syphilis. Be suspicious of atypical looking granulomas or infections of the finger. Remember it could be syphilis. Scabies, primary eczema, pityriasis rosae, dermatitis medicamentosa, erythema multiforme, psoriasis, measles, chickenpox, smallpox and rose spots of typhoid fever may at times clinically closely resemble the secondary manifestations of syphilis. Be careful to avoid stating to the patient "you have syphilis," on basis of an atypical skin dermatitis that you think might be syphilis. Further question the patient as to sexual exposure or contacts and say "We shall take a blood test for syphilis." Then with confirmatory laboratory serology you can state "Your blood test indicates syphilis." Time again I have patients referred to as having secondary syphilis when the dermatitis was in reality eczema, scabies or chicken pox and confirmatory serology was entirely negative. Remember that the secondary stage of syphilis is the period when antibodies are being produced and patient's serology gives a strongly positive reaction.

Tertiary gummata and skin lesions can often clinically resemble a carcinoma and it is sometimes difficult to differentiate syphilis and carcinoma and sometimes they both occur together. Think of carcinoma of the penis

in any chronic granulomatous lesions of penis or vulva in which syphilis and other venereal diseases have been eliminated; do a biopsy when in doubt. Remember tertiary lesions are often serpiginous or annular and can look like a ringworm or creeping eruption. I remember an aged Indian who had a serpiginous tertiary skin lesion that had been treated for ringworm for over a year before someone took his blood serology and found it positive and brought out a history of syphilis.

One laboratory test that is so frequently not done or evaded or passed off as not indicated is the spinal fluid examination. All treated cases of syphilis should by all means have a follow up spinal fluid examination. By this I mean primary and secondary syphilis at the end of the first year and all latent cases that have been treated in the past whether adequate or not should have a spinal fluid examination. Many of the so-called Wasserman fast cases are asymptomatic neurosyphilis and many cases of paresis and tabes could have been prevented if only the physician had told the patient he or she should have a spinal fluid examination. If you do not do a spinal fluid examination yourself or do not have confidence in your ability to do one refer the patient to someone who can. The technic and dangers have been over-emphasized. The tap can be safely done as an office or home procedure. There is a reluctance as most patients do not want to go to a hospital for this test, either because of expense or fear of disclosure of their disease to others.

In conclusion may I add, be syphilis minded but not a syphilis fanatic. Be thorough and careful, remembering that the elusive spirochete with its many manifestations of symptoms has been the great masquerader of all diseases. Keep asking yourself could this symptom or lesion be due to syphilis.

SKIN COMPLAINTS OFTEN FIRST SIGNS OF UNDERLYING MENTAL DISEASE

Certain skin complaints often are among the first signs of an underlying mental disease, according to two Chicago doctors, Theodore Cornbleet, M.D., and Meyer Brown, M.D., from the Department of Dermatology of the University of Illinois College of Medicine and the Department of Nervous and Mental Diseases of Northwestern University Medical School.

Disturbed sensations of the skin which cannot be traced to any rational source should always be suspected. Some of the most common of these are intense itching which develops suddenly, a feeling of numbness, tingling, burning, drawing, heat or cold, a sensation of insects crawling or of droplets falling on the skin.

An actual skin disorder may sometimes be accounted for by excessive washing or cleansing of the skin which springs from a delusional idea, the doctors point out. Unreasonable concern over the appearance of some simple condition such as a few additional facial hairs or moles or increased dryness or oiliness of the skin, as well as complete indifference to serious skin disease, also may indicate that a psychiatrist's services are needed. Excessive sweating, feelings of warmth, blanching or flushing or blushing may or may not be part of a set of psychiatric symptoms. More obvious are bizarre delusions involving the skin and self-induced injuries.

CHOLECYSTITIS AND CHOLELITHIASIS*

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The surgeon, the internist and the general practitioner are equally interested in diseases of the extrahepatic biliary ducts, and the gallbladder. Inflammations and occasionally neoplasms are the principal lesions which require the ministrations of a surgeon. Cholecystitis, cholelithiasis, and the interrelation of the two present the major problems.

ACUTE CHOLECYSTITIS

The exact mechanism which initiates an acute inflammation of the gallbladder is not known. Occasionally, vascular obstruction produces hemorrhagic infarction of the viscus. The subsequent acute cholecystitis results in an acute generalized peritonitis. Usually, however, acute cholecystitis is a non-specific inflammation caused by streptococci or staphylococci, or by microorganisms of the *Escherichia* and, now rarely, of the *Eberthella* groups. Womack and Bricker¹ have shown experimentally that an acute cholecystitis may be induced by a temporary increase in bile salt content in the gallbladder. In addition to this chemical cholecystitis, an inflammation of the gallbladder, according to Bisgard and Baker², may be produced by enzyme action as the result of reflux of pancreatic secretion into the gallbladder. These factors probably cause cholecystitis or play a contributory role more often than suspected.

In acute cholecystitis, no matter what the cause, the involvement usually commences within the mucosa and extends outward. Infiltration with edema fluid and extravasated blood causes enlargement, firmness and red brown discoloration of the viscus. The thickness of its wall may increase tenfold. The lumen usually contains a mixture of bile, blood and pus. Only rarely are gallstones present in a gallbladder with acute cholecystitis. The acute process may end in perfora-

tion of the gallbladder with acute focal or diffuse peritonitis, rarely it may subside. An acute cholecystitis therefore should be regarded as a surgical emergency the same way as acute appendicitis is and should call for immediate removal of the gallbladder.

CHRONIC CHOLECYSTITIS

Chronic cholecystitis is usually assumed to be a sequel to an acute inflammatory process in the gallbladder. It is true that the most common variety of chronic cholecystitis is the healing state of a subsiding acute cholecystitis or the healing state of an acute cholecystitis superimposed on a previous chronic cholecystitis. Another variety is a sequel to the presence of pure gallstones in the gallbladder. A third variety develops independently of the above causes as a result of recurrent or continuous mild injuries interfering with the normal resorptive function of the viscus. Since so many variables operate in the production of the chronic inflammatory reaction, practically no two gallbladders with chronic cholecystitis are exactly alike. They do, however, have certain features in common which aid in their recognition clinically. One of these is the almost invariable presence of gallstones in the gallbladder. The gallstones in some instances are the sequel to, and in others are the cause of the chronic inflammatory state of the viscus.

The wall of the gallbladder with chronic cholecystitis is thickened from two to five or even 10 times its usual width. The lumen of the cystic duct is at least twice its usual diameter, and may attain a size 10 times the normal. Because of the invariable presence of gallstones in the gallbladder with chronic cholecystitis surgical removal is always indicated though the operation is one of election rather than an emergency.

CHRONIC CHOLECYSTITIS WITH SUPERIMPOSED ACUTE CHOLECYSTITIS

Acute cholecystitis may occur not only in an intact gallbladder, but also in one in which

*Presented before the Oklahoma City Clinical Society, October, 1946. From the Department of Pathology, School of Medicine, University of Oklahoma.

a chronic cholecystitis is already present. Although the condition is frequently referred to as an acute exacerbation, actually the acute inflammatory process of varying degrees of intensity is grafted on the chronic inflammatory process. The gross appearance of such a gallbladder differs little from that of one with acute cholecystitis, except that gallstones are usually present.

CHOLELITHIASIS

Because of the frequent association of cholecystitis with gallstones, a thorough understanding of this association is indispensable in planning rational treatment of a patient who has cholecystitis with cholelithiasis.

It is known that gallstones are formed from normal constituents of the bile, such as cholesterol, calcium bilirubinate and calcium carbonate. When composed almost entirely of one of these substances, they are referred to as "pure" gallstones. When they are composed of a mixture of two or all of these substances, they are referred to as "mixed" gallstones. When pure gallstones acquire a shell of a mixed gallstone, the results are "combined" gallstones.³

Pure gallstones are hepatogenous, their formation being due to a disturbed liver function. If there is, for example, an excess of cholesterol in the blood, an excess is excreted in the bile and a pure cholesterol stone may form in the otherwise normal gallbladder. When small, about one cm. in diameter, the pure cholesterol stone is oval or round with a crystalline surface. When large, up to five cm. in diameter, the surface is rough and the crystalline structure is discernible only on the cut surfaces which have a glistening radiating pattern. A pure cholesterol stone is always solitary.

When an excessive number of red blood cells are destroyed for any reason, an excess of bilirubin is excreted in the bile and calcium bilirubinate stones may form in an otherwise normal gallbladder. These stones are jet black, crystalline or amorphous, are usually multiple, and are rarely over one cm. in diameter.

Pure calcium carbonate stones are exceedingly rare, gray white and amorphous. Their presence seems not to be related to any known disturbance of calcium metabolism.

Pure gallstones comprise about 10 per cent of all gallstones and are usually silent, i.e., they produce no clinical manifestations. Their presence however, may predispose to chronic cholecystitis.

Mixed gallstones are cystogenous. The presence of an inflammatory process in the gallbladder allows the solvents (bile acids) to be resorbed faster than the stone forming constituents. As a result, mixed gallstones form by the processes of precipitation, adsorption and crystallization. They are composed in varying proportions of any two or of all three of the stone forming constituents of the bile. They are always multiple and usually faceted. Their size, shape and color depend on the relative amounts of the component substances. Mixed gallstones comprise about 80 per cent of all gallstones.

Combined gallstones usually have a nucleus of a pure gallstone and a shell of a mixed gallstone. When single they are the largest of gallstones. Combined gallstones comprise about 10 per cent of all gallstones.⁴

To sum up, the following points are of immediate interest:

Acute cholecystitis may occur in a gallbladder free of gallstones. If it occurs in one containing pure, mixed or combined gallstones, the acute cholecystitis is usually unrelated to the gallstones present.

As long as gallstones remain within the gallbladder, they may produce no clinical manifestations. This is particularly true of pure gallstones.

A gallbladder with chronic cholecystitis, containing mixed gallstones, practically always has its cystic duct dilated and its muscular coat hypertrophied as a result of intermittent increased intravesical pressure. This intermittent increased pressure within the gallbladder may well be one of the most important causes of the clinical signs and symptoms of chronic cholecystitis. The dilatation of the cystic duct leads eventually to an incompetence of the folds of Heister with the further result that the gallstones can pass from the gallbladder into the cystic duct and through it into the common bile duct where they may produce the characteristic clinical signs and symptoms of obstructive jaundice.

Ordinarily, only mixed gallstones pass through the cystic duct into the common bile duct. Therefore, when the gallbladder contains mixed gallstones, an exploration of the common bile duct is usually indicated.

Finally, it should be added that chronic cholecystitis, whether it is manifested by severe, by mild, or by no symptoms at all, constitutes a potential danger to the patient. First, because the chronic inflammatory process produces progressive and irreversible changes in the gallbladder. Second, because

the biliary calculi invariably present in a gallbladder with chronic cholecystitis are provided with opportunities to migrate. Third, because chronic cholecystitis predisposes to acute cholecystitis. In fact, chronic cholecystitis with a superimposed acute cholecystitis is the lesion which most commonly necessitates surgical intervention and re-

moval of the gallbladder.

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A REVIEW OF THE MANAGEMENT OF SYPHILIS*

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The management of the great infection of syphilis at this period is controversial, and many methods of procedure are being advocated. The advent of penicillin, and other quick treatment methods, has brought into this field of medical thought many changes in diagnosis and therapy on which not all of the profession are in agreement. Medical history may be repeating itself in the field of syphilology as was observed following the discovery of Ehrlich's Magic Bullet. At that time, this subject was in a definite phase of transition, and the careful clinical studies of syphilis which the great Fournier and his pupils so studiously fostered were endangered. Again, we see sound clinical principles being replaced by oversimplification and mechanization. At this time we should recall the necessity of clinical observation and be reminded that syphilis can neither be diagnosed nor treated wholly by reliance upon the laboratory alone; but that this diagnosis and treatment must be accomplished by a careful study of the patient as an individual in relation to the biology of his infection.

For the sake of brevity, the management of syphilis will be considered by studying the two great periods in the course of this infection. These two periods, the early and the late, are very unlike, almost as though they were two separate diseases. To make a distinction between early and late syphilis it is

necessary to call attention to the fundamental pathology which formulates these two stages. The early stage is characterized by a uniformity of the distribution of organisms and lesions which soon fade into a more quiescent period of latency. At this point the fundamental background of immunity is established, affording the patient the immunological protection which allows him to live in more or less harmony with his disease for a longer or shorter period of time. Recurrent outbreaks become less and less frequent, and the periods of apparent inactivity become longer until the disease shows no tangible evidence of its existence; and throughout the full course of this period the disease is below the clinical horizon. This period of latency may vary from a few months to a lifetime, but it must not be mistaken for a period of inactivity even though it is a product of a relative immunity maintained by a slow chronic inflammatory process. Certain changes are taking place, and the relationship between the organism and the host is being established. The condition of fulminating bacteremia, where the blood is swarming with spirochetes, has changed to a period of selectivity and the immune processes of the body have placed the disease in the position of establishing itself in organs where the resistance is least, and slowly produces a state where the various tissues become allergic to the presence of the infection. This relationship, entirely different from the early stage of the disease, makes it possible for a few organisms to produce much destruction, and brings the disease process to a stage where it is

*Presented before the Section on Medicine of the Oklahoma State Medical Association at the Annual Meeting, May 14, 1947.

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dangerous to the patient himself, in contrast to the early stage where he was a menace to others.

The management of the early stage of syphilis, when the patients are usually young and robust, presents an opportunity for a more or less set formula. The diagnosis of syphilis in its early stage is entirely a laboratory procedure, and where such valuable information is available I feel that no physician has the right to make a clinical diagnosis without laboratory confirmation. Once treatment is started on a clinical basis the opportunity for laboratory confirmation is lost within a few hours, and the patient has to be managed through the rest of his life on this diagnosis. The darkfield microscopic examination is diagnostic from the first clinical appearance of the disease and the serological tests become positive from one to two weeks after clinical symptoms appear. Screening tests and single serological tests are dangerous. A battery of tests is more accurate and affords safer diagnosis.

Once the diagnosis is established in early syphilis, on a laboratory basis, the question of therapy is immediately of grave importance. Here the almost sacred doctor-patient relationship begins and the physician who overlooks it and fails to treat his patient with kindness, dignity and consideration has failed to lay the groundwork for the best prognosis. The outcome in the management of early syphilis is to a great degree dependent upon how the doctor and his patient get along and upon the respect each has for the other because when a patient changes his doctor in the management of early syphilis his prognosis is endangered. The physician's duty does not end with the consideration of his patient at this stage of the disease. He must account for the problem of contagion and must answer the question "from whom to whom?" Contacts must be sought out and examined and if he does not routinely do this himself, the health department should be notified.

The actual method of treatment of early syphilis at this time is not entirely agreed upon. Hardly any two clinics are in complete accord on procedure and each presents logical reasoning to support its choice of methods. Most clinics wish to guard against over-mechanization — a practice which is not clinically sound. The aim of therapy of early syphilis is the sterilization from syphilitic infection. With the advent of penicillin we have been afforded another valuable tool

which offers much in the accomplishment of this plan and is our number one drug in this respect. The fundamental consideration of penicillin as a therapeutic agent is very interesting and helps us to correctly place it in our treatment program. Eagle says, "After penicillin there is much to be expected." This is not only true of penicillin but of every other drug we have. There are many types of penicillin available but penicillin G is found to be the most active. Many therapists feel that other antibiotics may prove very useful when proper research has established their correct therapeutic value. The effectiveness of penicillin therapy is handicapped by its rapid excretion which causes much to be wasted and which currently prohibits its use as an office procedure. Penicillin in wax may be the answer but at present our experience is too limited to allow its acceptance routinely. The time factor of exposure of organisms to penicillin of proper blood level is basic in this question. The location of organisms alters its efficiency in a similar manner to other antiluetic therapy. Due to the fact that syphilis organisms multiply slowly the fast excretion of penicillin is another handicap to its effectiveness. Other agents are well used in combination with penicillin and it is apparent their synergistic action is quite beneficial. It is fairly well accepted that the efficacy of penicillin therapy is enhanced by intravenous arsenic, intramuscular bismuth and increased temperature. Many combinations are possible, each having a place, and many formulas for the treatment of early syphilis are advocated. The constant appearance of new plans justifies the observation that the ideal has not yet been reached. Then tendency in this respect is to increase the length of time the organisms are exposed to the proper blood level of penicillin fortified by arsenic and bismuth therapy. I think there is little doubt that penicillin is our number one drug, arsenicals and bismuth coming in turn. My usual plan for the treatment of early syphilis in young individuals, after laboratory diagnosis, is to hospitalize the patients and give them 50,000 units of water soluble penicillin crystalline G. This is given every three hours for 80 doses, making a total of 4,000,000 units. Four doses of neoarsphenamine are given during the course — one on the first, third, fifth, and eighth days. The patient is then discharged from the hospital and eight more doses of arsenicals are given according to tolerance and followed by 20 doses of bismuth. The progress of the case is then observed clinically and also

by quantitative serological analysis, and upon any increase in the titer, re-treatment is established. This plan is given as a pattern and must be fitted to the individual case.

The prognosis of early syphilis is usually dependent upon the duration of the disease, and decreases in proportion to the age of the infection in relation to the starting of treatment. Intensive treatment of this type in early syphilis will cure a very high per cent of cases. Through such treatment, however, the development of immune processes are abolished, and it does not subject the patient to danger if treatment completely cures the disease. If therapy is inadequate, it leaves the patient in a vulnerable position since the development of his natural defenses is disturbed and the disease is not cured. This circumstance often results in various forms of therapy resistance or fixed serological states. After complete treatment and properly observed prolonged rest we are often pleasantly surprised to find many of these "fixed Wassermanns" are in our negative group.

The management of the various forms of late syphilis constitutes a voluminous chapter, and only generalities can be touched upon at this time. Here it is not out of place to warn that any type of syphilis of the aged is best treated most conservatively. In the late stage of syphilis the individualization of cases is demanded and mechanized plans, such as have been described, have no place. First, in the general consideration, is the accurate clinical evaluation of the patient considered as an individual with a disease. A thorough physical examination with proper laboratory investigation is indispensable. The question of complicating diseases must be reckoned with and if properly placed and diagnosed, these abnormalities will not be considered as therapy complications. Since syphilis may involve any system of the body it is many times proper to have consultation with the internist to correctly evaluate the condition.

Syphilis complicated by pregnancy offers one of the most brilliant examples where proper therapy and diagnosis affords results almost unequalled in any field of preventive medicine. This has been possible for many years and with the addition of penicillin to our therapy, better results may be expected. A routine investigation of the serology in all pregnancies, a close search for treated cases, a careful history with a complete physical examination will uncover the infection in nearly all instances. Since a large majority

of cases are in the latent period we have to rely on serological findings and history for this purpose. When the condition is diagnosed in the early months of pregnancy the treatment recommended is mild therapy to avoid Herheimer reaction; then 4,000,000 units of penicillin with the use of arsenic and bismuth conservatively in alternating courses through the remainder of the gestation period. This plan is extensive but it is safe.

The management of luetic disease of the various systems and organs will be skipped with the exception of the most common and very important — involvement of the central nervous system. A study of central nervous system syphilis presents a most fascinating problem and first in importance in this phase of luetic disease is asymptomatic neurosyphilis. There is little doubt that many cases of central nervous system involvement in early cases spontaneously reverse their fluid findings or are cured by general treatment. Recessive involvement is always possible under these conditions and frequently presents a very difficult problem of diagnosis. It will be recalled that this part of the course of neurosyphilis is usually slow but is a gradual inflammatory process which remains below the threshold of clinical perception. It is a clinical observation that seven to 15 years are required for it to announce itself. Here the art of practice is many times taxed to secure the proper cooperation of the apparently well individual. This is accomplished, however, when absolute frankness is maintained and simple explanations are made. Asymptomatic neurosyphilis is only diagnosed by an examination of the spinal fluid, calling forceful attention to this procedure. This condition is the most frequent complication found in the long period of latency and is many times present when the blood Wassermann is negative. An investigation of latent syphilis is not complete without a spinal fluid examination. The old mistake of relying on a negative blood Wassermann is too often made. Information obtained from the examination of the spinal fluid is of great prognostic value. The importance of having this information is obvious when we are reminded that abnormalities of the spinal fluid precede by years the appearance of clinical neurosyphilis. The patient is indeed fortunate who has this information available to the physician charged with his care. Once the diagnosis of asymptomatic neurosyphilis is established the prognosis and the treatment are found to be

affected by many things. The strict individualization of cases is necessary and the many factors which enter into the management of the case make a varied program an obligation. The spinal fluid findings are of much prognostic aid and the prognosis recedes with the degree of positivity of these original findings. The final outcome must take into account other things such as the duration of infection, previous treatment, the age of the patient, time factors in relation to treatment history and the general physical and nervous background of the patient. The rule for asymptomatic neurosyphilis is progression, but this is not true of all cases. Asymptomatic neurosyphilis in elderly patients who have had the disease for many years is strong evidence against the statement that late asymptomatic neurosyphilis usually progresses to clinical neurosyphilis.

The aim of treatment in asymptomatic neurosyphilis is prevention of clinical neurosyphilis and changes for better or worse in the spinal fluid are usually used in prognosis and as a guide to therapy. The blood Wassermann may be positive or negative, especially in treated cases, and is of little value in management. These patients are usually in early middle life and their physical condition is good. My usual procedure in therapy is to prepare the case with mild treatment to avoid Herxheimer reaction. This is usually done by small doses of bismuth, potassium iodide and mild use of the arsenicals. The patient is then hospitalized, penicillin therapy started, and continued in combination with fever therapy. Typhoid vaccine or malaria are used, typhoid vaccine preferably, 4,000,000 units of penicillin and 10 to 14 fevers constituting the usual plan. This is followed by a course of arsenicals and bismuth given separately. The fluid is rechecked by quantitative tests at three, six and nine months' intervals and the results of this are found to be very encouraging. I believe that fever therapy is the most effective single form of treatment in asymptomatic neurosyphilis and there is little doubt that the combined method, taking advantage of synergistic action, is the best. In conclusion, it may be stated that spinal fluid improvement is a relative, but not an absolute guarantee against clinical progress, and the lack of spinal fluid improvement, and especially spinal fluid progression is an extremely grave prognostic sign and portends parenchymatous neurosyphilis. Once the central nervous system is involved to a degree sufficient to present a clinical phase definite

types may be recognized. Many divisions are possible, but a simple and workable outline is as follows: the interstitial type which involves the supportive structures of the brain and spinal cord and the parenchymatous which involves true nervous tissue. These may be combined and many times are. The management of interstitial neurosyphilis is conservative and to produce a Herxheimer reaction may be fatal. These cases are many times found with brain hemorrhage as the primary symptom. The aim of treatment is to stop progress and to maintain any improvement and treatment usually consists of small doses of bismuth, the use of potassium iodide late, and the employment of penicillin and arsenic according to the degree of improvement. I have found that many of these cases do not well tolerate fever therapy. The true parenchymatous involvement is usually diagnosed by failing general health, mental symptoms, persistent headache, altered pupillary reflexes, or spinal cord symptoms. The progress of this type of syphilis is usually rapid, and trials at conservative therapy are not justified. These patients are many times debilitated with loss of weight, a bad blood picture, and are nearing a state of nervous and physical exhaustion. Any treatment program must take these into account. These cases are hospitalized and fever therapy is usually started at once, with addition of penicillin after several days of fever. We are many times astonished to note the degree of improvement in a once hopeless case. They are usually returned to a high per cent of their original personal efficiency and rarely is any case too advanced to be denied the benefit of fever and combined treatments.

In general conclusion, for the management of all types of syphilis, the physician must realize that his responsibility is never ended. He must remember that in all syphilis, relapse is the rule and the patient's only safeguard against recurrence is proper post-treatment observation. Much responsibility of a medical and social nature is associated with the care of the syphilitic and there is no doubt that the successful therapist is the one who can correctly interpret and correlate these many factors.

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CLINICAL PATHOLOGIC CONFERENCE

The University of Oklahoma School of Medicine

Presented by the Departments of Pathology and Dermatology and Syphilology

BELA HALPERT, M.D. AND EVERETT S. LAIN, M.D.

OKLAHOMA CITY, OKLAHOMA

DR. HALPERT: Cancer of the skin is usually of epithelial origin and so is properly termed carcinoma. There are a variety of connective tissue elements which may also provide the origin of a malignant neoplasm and these are, of course, sarcomas. Both types of cancer, if recognized early, can be cured. Curability depends upon localization. Once distant metastases have occurred, treatment can be only palliative. The course of the disease may be rapid, or slow, depending upon the cellular character of the neoplasm. How rapid this growth may be is well demonstrated in today's case. Dr. Lain will present and analyze the clinical data. He is professor emeritus of dermatology and syphilology and a pioneer in radiotherapy. He has seen and treated more skin diseases than anyone else in the state of Oklahoma. We are very pleased to have you, sir.

PROTOCOL

Patient: E. S. C., white male, age 25, admitted August 12, 1946, and January 28, 1947; died April 2, 1947.

Chief Complaints: Growth on neck, behind ear; loss of weight.

Present Illness: In May, 1946, the patient permitted a barber to remove with an escharotic a pigmented mole from the upper right portion of the forehead. This process took about three weeks, and while it was going on, the patient noticed what at first appeared to be a pimple in the right neck region. It grew rapidly and by late in June is looked like a small boil. A physician was consulted, and the patient was advised to return in a couple of weeks for penicillin treatment and incision. The patient moved to another town and, on July 22, 1946, consulted another physician who incised the lesion, by now three to four cm. in diameter, and obtained no fluid. For three days the patient applied heat with a hot water bottle, with no improvement. By August 12, 1946, the lesion was 10-12 cm. in diameter and the patient was referred to this hospital. The lesion was not painful. The patient had lost 12 pounds

in weight in the three months before admission.

Past and Family History: Essentially non-contributory.

Physical Examination: On the first admission, patient had in the right temporo-parietal region a flat, crusted lesion three cm. in diameter. On the right side of the neck, just behind and below the ear there was a mass shaped like a truncated cone with a base about 10 cm. in diameter. The center was necrotic, and the rest of the mass was soft and fluctuant. The posterior cervical lymph nodes were enlarged up to 1.5 cm. in diameter. The axillary nodes were palpable on both sides. There was no abnormal pigmentation of the skin. Temperature, pulse, and respiration were within normal limits. The blood pressure was 114/60.

Laboratory Data: The urine was yellow, cloudy, and alkaline, had a specific gravity of 1.010, and contained no albumin, glucose or melanin. Microscopic examination revealed many bacteria. Blood contained 11.5 Gm. per cent hemoglobin; RBC's numbered 5,350,000 per cu. mm.; the white blood cell count was 18,400 with 82 per cent neutrophils and 18 lymphocytes. The blood N. P. N. was 28.7 mgm. per cent, cholesterol 180 mgm., calcium 7.1 mgm., phosphorus 2.9 mgm., and total protein 6.1 Gm. per cent. The Mazzini test of the blood was negative. On August 12, 1946, a biopsy was made of the growth on the neck. On August 12, 1946, roentgenograms disclosed no pulmonary metastases, and no abnormal findings in the cranium.

Clinical Course: The patient received irradiation to the lesions, together with other supportive and palliative treatment. On August 16, 1946, it was decided the lesion was inoperable since the axillary nodes were involved. On September 9, 1946, roentgenograms disclosed obliteration of the left costophrenic angles with a localized area of infiltration in the base of the left lung. That day he was discharged from the hospital

with the neck tumor somewhat reduced in size. He was followed in the Out-Patient Department. On November 27, 1946, a tumor on the right forearm just distal to the elbow was removed. Roentgenograms disclosed the costophrenic angles free and the lung fields clear. On January 17, 1947, he complained of pain in the right leg, had a lesion on the right forehead, and the tumor mass on the right forearm had returned. Roentgenograms disclosed a circumscribed area of infiltration in the left third interspace and in the right fifth interspace. There was a circumscribed area of decreased bony density in the frontal area of the skull, and also in the lower border of the acetabulum of the right hip. On January 28, 1947, he was readmitted to the hospital. On February 18, 1947, roentgenograms of the chest disclosed numerous nodular densities throughout both lung fields with diffuse infiltration of the right lung, more marked in the base. The mediastinum was widened. All the lesions continued to increase in size and became more painful. The patient developed a painful and tender area over the right fourth rib lateral to the nipple. He became pale, weakness increased and his appetite failed. He died on April 2, 1947.

CLINICAL DIAGNOSIS

DR. LAIN: I sometimes think that I am only a freshman in the field of medicine when I think of the recent progress made in laboratory diagnosis and other techniques which have been highly developed since I was a medical student. I am somewhat under a handicap today in being expected to confine my remarks to the case presented, since I did not see the patient. I am reminded of the colored preacher who was called on to give a funeral address some days after the victim had been buried. After speaking for a while he realized that he was not reaching the height of his intended emotional oratory. He could not arouse any cries of anguish or weeping groans in his audience. He suddenly decided he had best cease talking and in explanation concluded with the remark, "Brothers, I just can't preach a funeral sermon unless I have the carcass before me!"

In looking over this history I note nothing that is unusual about this case as compared with many other cases we have had in past years in our University Hospital. I even recall the sad death of two or three medical students with this type of dynamic malignancy. In reviewing this history, from the beginning to the time of death, I consider that this patient lived beyond the average

period for one having a malignant melanoma, more particularly since the lesion was located on the side of the neck where the lymph supply is so abundant. Melanomas are first disseminated through the lymphatics as tumor emboli, which more or less float through the lymph channels. Following involvement first of lymph nodes, there is eventual spread through the whole lymphatic system. During this progressive spread the malignant melanotic cells also invade the blood vessels and become more rapidly disseminated until finally death results from an overwhelming carcinosis. Several types of malignant melanomas can be described. One, often called melano-epithelioma, bears resemblance in its structure to epithelium. It grows more slowly, and unless it is irritated or stimulated, does not metastasize early. Another type of melanoma (all of these lesions are nevoid in character) may cause pathologists much trouble in that the characteristic black pigment may be entirely absent. These tumors are called amelanotic melanomas. This type is also the most difficult to diagnose clinically because the lesions do not present the characteristic bluish-brown color. For this reason, this type of tumor is usually inoperable before a diagnosis is made. A third type may be called melanosarcoma because of the resemblance to connective tissue cells. It may be subdermal in origin and may become widely disseminated even before it is discovered by the patient. A review of case records of cases of melanomas in this or any other public hospital will disclose that 80 or 90 per cent of the patients have had unwise attempts at treatment by a barber or have used somebody's cancer paste before coming to the hospital. I regret to say that many case records also reveal that some general practitioner, who has had but limited experience with this treacherous, explosive type of malignancy, may have performed improper treatment through lack of knowledge. The true melanoma may be properly compared to a charge of dynamite just waiting for something to set it off. The history of this particular case is limited, though I can see more in its early appearance and growth than is recorded here. This man surely had a pigmented mole long before his barber tried to remove it. It became irritated by hair cuts and daily shaving before the audacious, ignorant barber tried to remove it with a chloride of zinc paste. Melanomas may occur at any age. Dr. Russo has reported from our University Hospital three cases of children

having melanomas. Perhaps two of these were congenital. Not all of these nevoid lesions are present at birth, but they usually develop during childhood or early 'teen age. This man must have had some kind of pigmented mole for many years before it became traumatized and began its rapid growth. He came to the hospital a second time, then went home and perhaps continued to work, then returned a third time because of loss of weight and gradual decline of strength, a common history of such cases. I heard Dr. Adair give a report on cases of malignant melanomas which had been seen at the Memorial Hospital in New York. He said that 80 per cent were inoperable when they arrived, and many already had wide metastases when first examined by staff members. I think that all that could have been done for this poor patient after he was first admitted was done. He had already passed the hope of benefit from radiation or surgery.

It is proper, I believe, to say a word about differential diagnosis by clinical methods since this may be of value to the students. Superficial melanomas of all malignancies are the most easily diagnosed by experienced clinicians. The average case of melanoma which comes to us in private practice or in the hospital first gives a history of having had for many months or years a deep brown or bluish colored mole or birthmark. There is a distinct difference between the appearance of a melanoma and the ordinary brown mole. There may be some borderline cases in which differentiation is difficult. The melanoma usually has a deep-bluish or black color, not only on the surface, but throughout its entire structure. It does not have the appearance of an ordinary mole or a sebaceous cyst. It is not painful and is without tendency to bleed. I think you are justified, if laboratory work is not available, to puncture it with a sharp needle. The true melanoma will exude a black, cloudy exudate of powder-like granules. The dermatologist's diascopy is of value in this kind of lesion. By pressure you can differentiate a melanoma from a hematoma. Hematomas are soft, follow an injury, and develop rapidly. Hematomas on the lips are sometimes caused by bruises from over-zealous kissing. By pressure with the diascopy you can press out the venous blood of a hematoma and disclose a clear-like tissue beneath. Pressure (diascopic) on a melanoma reveals black, powder-like specks in the firm tumor. Of course, a biopsy with microscopic study is the final word in diag-

nosis. It is my personal opinion that trauma may stimulate a melanoma to "explode" and metastasize widely in 48 to 72 hours. Do not take chances on such lesions. Do not tell the patient to let it alone until a diagnosis is made. Such advice has killed many patients. What the doctor means is don't pick at it or injure it in any way. But the patient oftentimes thinks he means to go home and forget about it. Don't be satisfied until you can be certain whether or not you are dealing with a melanoma, for only in its early stages is a melanoma curable by complete removal with wide surgery and thermocautery.

ANATOMIC DIAGNOSIS

DR. HALPERT: It is always instructive to listen to the voice of experience. Things which were immediately evident to Dr. Lain in this case may well have puzzled one with less experience.

At necropsy this patient was markedly emaciated; he weighed only 110 pounds. Most striking were the several cauliflower-like tumor nodules present on the skin. These varied from cream to reddish brown. One such lesion, eight cm. in diameter and elevated four cm., was over the left forehead. A slightly larger tumor lay just behind and below the right ear. Smaller nodules were seen on the trunk and over the right forearm. Right axillary lymph nodes were moderately enlarged and firm. From the x-ray films which you have seen you know that there was widespread metastasis involving the lungs and skeleton. Several biopsies had been made and histologic examination verified the clinical impression of malignant melanoma. There was approximately 300 cc. of fluid in the peritoneal cavity, about 1200 cc. in each of the pleural cavities, and 200 cc. in the pericardial cavity. This was clear serous fluid and probably represented nutritional edema. In addition to metastases to the skin, which were numerous, there was neoplastic involvement of the lungs, and hilar and mediastinal lymph nodes. The lungs were literally studded with nodules which on the cut surfaces were not pigmented, but were white. It was largely on the histologic structure, rather than the presence of melanin pigment, that the diagnosis was made. This growth corresponds to the type which Dr. Lain termed amelanotic. The lungs were almost symmetrical in their involvement. They weighed 1380 grams and this increase (normal 650 grams) was almost entirely the result of tumor growth. In addition there was a single nodule in the liver and one in the

pancreas. This limited involvement of the liver is unusual because the liver is ordinarily fertile soil for this kind of growth and usually presents numerous bulky metastases.

Dr. Lain has mentioned the cellular origin of these growths. There is slight disagreement as to preferred nomenclature and their exact origin. The important thing to remember is that there are cells on the outer and inner surfaces of the mesoderm, adjacent to the ectoderm and entoderm, which can produce this pigment. The cells do not produce a colored pigment themselves. The black colored melanin pigment is formed after contact with an enzymatic substance, chemically close to the suprarenal secretion, 3:4 dihydroxyphenylalanine. This is called the dopa reaction. Melanomas are considered by most to be epithelial in origin, but in order not to argue whether they are carcinomas or sar-

comas, we call them malignant melanomas. The cells which produce the melanin pigment are called melanoblasts. In the corium there are other cells which *contain* pigment, but which are incapable of its production. These are called chromatophores. They do not give rise to malignant melanomas.

Our final anatomic diagnosis is:

Scar of scalp (site of growth removed by chemical means)

Malignant melanoma involving scalp, lymph nodes and skin of neck, right, lungs, hilar lymph nodes of lungs, liver, pancreas and skin of forearm, right

Emaciation, with ascites, hydrothorax, bilateral and hydropericardium

Infarct of spleen

Decubital ulcers in scapular region, right, and hip, left.

MEET OUR CONTRIBUTORS

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"Where Does This Road Lead?" in the February Journal was written by *Ray H. Lindsey, M.D., B.S.*, Pauls Valley. Dr. Lindsey was graduated from the Northwestern University School of Medicine in 1929. His specialty is general surgery and he is a member of the American College of Surgeons and has been certified by the American Board of Surgery. Besides practicing in Pauls Valley, he was previously in the medical corps of the United States army. He is a former vice-president of the Garvin County Medical Society.

Bela Halpert, M.D., Oklahoma City, has a paper entitled "Cholecystitis and Cholelithiasis" in this issue of the Journal. Dr. Halpert graduated from the University of Prague, Czechoslovakia in 1921. He is now director of laboratories of the University of Oklahoma

Hospitals and Professor of Clinical Pathology in the School of Medicine. Dr. Halpert is certified by the American Board of Pathology for Pathologic Anatomy and Clinical Pathology. He is also a member of the American Society of Clinical Pathologists, American Association of Pathologists and Bacteriologists, American Society for Experimental Pathology, Society for Experimental Biology and Medicine and the American Association for Cancer Research. Dr. Halpert has been on the faculties of Johns Hopkins Medical School, the University of Chicago, Yale University School of Medicine, and Louisiana State University School of Medicine prior to coming to Oklahoma City. He is a Founder Fellow of the College of American Pathologists and President of the Oklahoma Association of Pathologists.

Join authors of "Quantitative Serologic Tests in Evaluation of Syphilotherapy" are *F. R. Hassler, M.D., M.P.*, *B.S.*, Oklahoma City, and *Catherine Harris, B.S.*, Oklahoma City.

Dr. Hassler received his B.S. degree in chemical engineering from Oklahoma A. and M. College, Stillwater, in 1923 and was city chemist for Colorado Springs for several years and later was director of laboratories at Durham, North Carolina. He received his M.D. degree from the University of Oklahoma School of Medicine in 1937 and his M.P.H. from Johns Hopkins. Before coming to Oklahoma City, Dr. Hassler was in the sanitary engineering department at Muskogee and Shawnee. He has been director of the laboratory at the state health department since 1941.

Catherine Harris is a graduate of the University of Oklahoma where she received her B.S. degree. She has been with the state health department since 1929 and is the principle serologist at the present time. She is a member of the American Public Health Association. Dr. Hassler is also a member of the organization.

President's Page

In this issue of the Journal on page 65 is given a summary of the Public Relations program of the Association for 1948, and which if successful should be continued for the years to come with the necessary changes made as needed. Every member should familiarize himself with the program as it will call for the sacrifice of many members' time. It is also the program which the raise in dues will finance.

Recent publicity in leading publications and the daily press has not been too kind to the medical profession and unless each of us individually recognizes our own place in the overall picture, we can expect little improvement.

We as physicians must realize that it is our own conduct with our patients that will write the final story. In my opinion there are three things we should do both collectively and as individuals. 1. Work out a plan on the local level for the handling of night and emergency calls. 2. Consult with patients concerning their ability to pay and make our charges meet their circumstances. 3. Give time to the patient when he consults with us. His trouble may be minor but to him it is big. The public's conception of the medical profession will always stem from the conduct of the profession as it conducts its daily practice.

Another program of the Association which should have universal support of all members is that of the Veterans Home Town Medical Program. It is unnecessary to explain the program in detail as earlier publicity has accomplished this purpose. I urge each one of you to fill out the application card and mail it at once. The veteran is entitled to the finest medical care available and only the medical profession can answer this demand. Let us do our part.

Paul B. Campbell.

President.

As the mariner relies on his compass...



So does the physician place his confidence in each
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*Entrance Foyer—Showing Stairway**Waiting Room Main Floor**Doctor's Consultation Room*

SUGG CLINIC OPENED AT ADA

**Modern Building, Fine Equipment
Incorporated in A. R. Sugg Clinic**

Few people set up goals for themselves and succeed in reaching these goals in a period of a few decades but Alfred R. Sugg, M.D., Ada, did just that thing.

Dr. Sugg's main ambitions were — to be a physician, to have a nice family and to build a large modern clinic. In December, 1947, the last of his three dreams was realized as the Sugg Clinic was opened at Ada.

A urologist and surgeon, he has 27 employes in the clinic now but when his first clinic was organized in 1933, Dr. Sugg and three other physicians, John B. Morey, M.D., William G. Peterson, M.D., and E. M. Gullatt, M.D., made up the original group.

When asked for biographical data about himself, Dr. Sugg said, "All there is of interest is, I simply left the farm in Arkansas, squeezed by the final examinations and got stranded here while I was looking for a location, dug in my cleats, and began to dream and plan this place 20 years ago." Dr. Sugg was graduated from the University of Arkansas in 1924.

Other than the four men who were in the original clinic, six more have been added and four additional staff members have been selected and will be with the Sugg Clinic soon. They include one for internal medicine, one general practice, one psychiatry and a pathologist. The six added since 1933 are E. R. Muntz, M.D., obstetrics and gynecology; M. L. Lewis, M.D., consultant;

George K. Stephens, M.D., pediatrics; Jerry G. Gwin, M.D., internal medicine; H. G. Yagol, M.D., x-ray and radium; and Rowe F. Bisbee, M.D. Five of the men, including Dr. Sugg, have been certified by special boards. They are Dr. Peterson, Dr. Morey, Dr. Muntz, and Dr. Yagol, and Dr. Stephens has passed his requirements.

One of the best equipped clinics in the southwest, cost of building and equipping the structure was about \$325,000.00. It is three stories high and has a full basement. It also has a penthouse on the fourth floor with air conditioning compressors, air conditioning evaporative condensers, steam boilers and elevator machinery.

The building provides a main office and drug room at the main entrance stair hall, a waiting room on each floor, a colored waiting room on the first floor, a consultation room and an emergency room with private entrance. Separate recovery rooms are provided on the second floor for men and women, and a recovery room in the basement adjoins the cystoscopy room. A children's play room adjoins the second floor waiting room which is near the baby and children's doctors. The walls of the play room are decorated with Mickey Mouse and his friends, including Santa Claus, and it also has a cabinet with counter for the care of children.

The building has a combination system of summer and winter air-conditioning and each floor is a separate zone in the heating system. Each floor above the basement is divided into four separate zones for air-conditioning. Fluorescent lighting is used throughout. Another feature

*Waiting Room Second Floor—
Door into Children's Playroom*

*Children's Playroom**Physiotherapy*

of the clinic is a dumbwaiter which carries records from record room to each floor. It is automatic and can be called to any floor and may be sent to any other floor. The telephone system is a private automatic dial system serving also as an intercommunicating system and a teletalk system is in operation between the nurse's station and waiting room, and a conduit system has been installed for future extension to each doctor's office in case the need arises.

Housed in a block of eight rooms, the x-ray department is unsurpassed in the southwest for the completeness of its equipment, both in x-ray machines and related furnishings. There is a cystoscopic room with the finest table obtainable and with complete x-ray equipment.

In all, there are five separate x-ray units. These range from a portable machine that can be taken to a patient's home, to a powerful deep therapy unit for treatment of internal conditions including cancer.

A combined fluoroscopy and spot film device enable a physician to take pictures as he wishes and in series

if that is desired. Diagnostic x-ray equipment for superficial therapy, automatic film changing equipment and other features making for fast, accurate handling of films are a part of the clinic.

Whirlpool baths, pictured on this page, are also outstanding features of Dr. Sugg's clinic.

OPEN HOUSE FOR PROFESSION

A reception and open house for all members of the Oklahoma State Medical Association will be held at the Sugg Clinic Sunday, February 22 so that all members of the profession and related professions will have an opportunity to inspect the newly constructed clinic. Hours for the reception are from 10 A.M. to 5 P.M., Dr. Sugg said in issuing the invitation.

THE MEDICAL SCHOOL

CALENDAR — FEBRUARY, 1948

SURGICAL PATHOLOGIC CONFERENCES — Each Tuesday 11:00 A.M. to 12:00 Noon.

MEDICAL CONFERENCES — Each Wednesday 9:00 A.M. to 10:00 A.M.

CLINICAL PATHOLOGICAL CONFERENCES — Each Thursday 11:00 A.M. to 12:00 Noon.

TUMOR CLINICS AND CONFERENCES — First and Third Tuesdays (February 3 and 17) 8:00 A.M. to 9:00 A.M.

UROLOGICAL PATHOLOGIC CONFERENCE — Second Tuesday (February 10) 8:00 A.M. to 9:00 A.M.

ORTHOPEDIC PATHOLOGICAL CONFERENCE — Last Tuesday (February 24) 8:00 A.M. to 9:00 A.M.

MONTHLY STAFF MEETING — Second Friday (February 13) Dinner, 6:15 P.M.

RADIOLOGIC CONFERENCE — Fourth Monday (February 23) 6:45 P.M. to 7:30 P.M.

Commander Hal Wiggins, (Med '36), has been assigned by the United States Navy Medical Corps to University Hospitals, Oklahoma City, for the year 1948. He is to receive specialized training in children's orthopedics.

Fred Dinkler, (Med '47), who is interning at St. Joseph's Hospital in St. Paul, Minnesota, was a visitor in Oklahoma City during the recent holidays.

Riley Foster, (Med '47), and intern in the Montreal General Hospital, Montreal, Canada, visited the Medical School when he was in Oklahoma City recently.

Edward M. Fugate, (Med '47), was in Oklahoma City during the Christmas season. Dr. Fugate is now interning at Detroit Receiving Hospital, Detroit, Michigan.

Another recent visitor to the Medical School was Omer Burgert, Jr., (Med '47), who is interning at St. Luke's Hospital in Chicago.

James K. DeVore, (Med '47), now at the State of Wisconsin Hospital, Madison, Wisconsin, was in the city recently.

Doug Wilson (Med '47), interning at the Indiana University Medical Center, Indianapolis, was a visitor at the Medical School during the recent holidays.

Carl Bailey (Med '33), has a residency in surgery at St. Anthony's Hospital in Oklahoma City. His offices at Stroud, Oklahoma have been taken over by Dr. Ross Demos (Med '45) for the time being.

CLASSIFIED ADS

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WANTED. Male or female lab technician. Opening new hospital at Hollis, Okla. Salary \$225 per month plus

meals, laundry and uniforms. Write, call or wire at once to C. N. Talley, M.D., Hollis, Oklahoma.

WANTED. Nurse anesthetist who can give open ether anesthesia for major surgery. Apply to W. K. Walker, M.D., c/o Talley Hospital, 501 N. 4th St., Phone 9, Marlow, Okla.

FOR SALE: One Wappler X-ray machine with vertical and horizontal fluoroscope in good condition. Price \$250; must sell at once. Call, write or wire, C. N. Talley, M.D., Hollis, Okla.

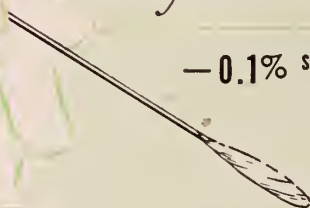
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GENERAL NEWS

\$20 OF 1948 DUES GOES TO PUBLIC RELATIONS WORK

Have you been wondering where your dues money is going during 1948? A new and extensive public relations program will require \$20.00 of each member's dues. These funds will be administered and expended by the State Medical Association's public relations committee working with the members of extensive sub-committees appointed throughout the membership so that the appointments will be geographically distributed throughout the entire state on a councillor district basis.

Following an intensive study of other state medical associations and public relation programs together with local evaluation and survey, the public policy committee outlined the recommendations which follow as a public relations program to be conducted by the state association. In order to accomplish the objectives of the program it is imperative that each member of the association cooperate with the public relations committees to make this unquestionably needed program a success. Questionnaires are being mailed out with each 1948 membership card and certificate and it is most important that each member take time to analyze the questions presented and return his expressed opinions as soon as possible. The committees are anxious to know the thinking of each member and to receive suggestions and comments. Only by individual response can the desires of the membership be known and considered. It's your association!

Members of the public policy committee are: McClain Rogers, M.D., Clinton; C. G. Stuard, M.D., Tulsa; John F. Burton, M.D., Oklahoma City; C. E. Northeutt, M.D., Ponca City; D. H. O'Donoghue, M.D., Oklahoma City; D. W. Darwin, M.D., Woodward. Sub-committee appointments are now being made and will be announced soon. Below is the public relations program as outlined by this committee and accepted by the Council:

1. Any public relations program directed toward the lay public must have certain fundamental principles as a basis of operation. The program must have public appeal, render a service, be sound in its claims and representations and have a definite goal.

2. The newspaper advertising program has had these conceptions in its promotion but such campaign is not sufficient in itself. It must be augmented by additional types of public contact and with a greater degree of professional participation at the local level.

3. Your Public Policy Committee has studied these matters and has certain recommendations to make to the Council. These recommendations are as follows:

- A. That the Public Policy Committee be authorized to extend its work through certain sub-committees to be appointed by the President and to serve at his pleasure. The sub-committees to be as follows: Newspaper Advertising; Radio; Awards and Contests; Cinema; Public Speaking; Professional Relations. It is felt that if these committees can be appointed and will function, an overall public relations program can be appointed and will function, an overall public relations program can be developed that will have an outstanding effect within the State of Oklahoma.

Your Committee feels that it must impress the Council with the fact that this activity of the Association given this added impetus will call for a great deal of sacrifice on the part of the membership of the committees and

for this reason their makeup must be given careful consideration. *Your Committee asks that the members of the Council be asked to carefully screen all members of the Association in their District and to select from five to 10 members who can be called upon to give of their time and abilities. Your Committee also is of the opinion that the younger men should have definite consideration for these Committee assignments.*

- B. Your Committee would like to report in synopsis form some of its ideas as to the duties of these sub-committees in their respective fields:

NEWSPAPER ADVERTISING: This medium of public relations has already been established over the years. Yet the selection of topics for presentation and the text of the presentation calls for careful and mature thinking. The present program reaches a reading public of approximately 1,250,000 through 138 weekly and daily papers. In addition to the paid monthly ads it is the opinion of your Committee that a weekly or bi-weekly news release should be made from the Executive Office. These releases should cover subjects such as public health, advances in medical sciences, preventive health hints, etc. This latter will be of little if any cost other than mimeographing and mailing.

RADIO: This great field of public contact has yet to be tapped in Oklahoma, however, the State Medical Society of Michigan has had great success in this field and your Committee recommends that the program for Oklahoma be patterned after that of Michigan.

Today in Oklahoma there are 20 radio stations representing 14 different cities with a potential listening audience in excess of the total population of the state due to the fact that radio is not a respecter of state lines.

Your Committee is of the opinion that radio programs having Oklahoma State Medical Association participation can be put on the majority of these stations at relatively little cost to the Association probably not to exceed \$1,000.00 and to run for one year. This, of course, means that the programs must have local sponsorship to pay for the radio time. At the present time an effort is being made to start such a program in Oklahoma City through Station KOCY on an experimental basis.

The Michigan Medical Society has produced a year's series of three minute broadcasts which the Association can purchase at a cost of approximately six dollars per week. These same programs can be utilized on all stations sponsoring the program on a staggered basis. Your Committee is of the further opinion that the sub-committee on radio work should develop live programs that could be broadcast locally, using members of the County Societies and leading lay persons such as P.T.A., American Legion, Church, etc., representatives in discussions of current health topics of general interest. The work of this Committee obviously would entail a great deal of research and work over and above the lay help that could be given by the Executive Office. Your Committee would recommend that an exhaustive search be made for a well qualified member of the Association interested in this type of work to head this Committee.

C. AWARDS, CONTESTS, AND LITERATURE: Your Committee is of the opinion that this type of public relations has a limitation on its value, however, among a certain segment of the population there is definite appeal. Consideration of the fields into which this sub-committee could enter are many and varied and

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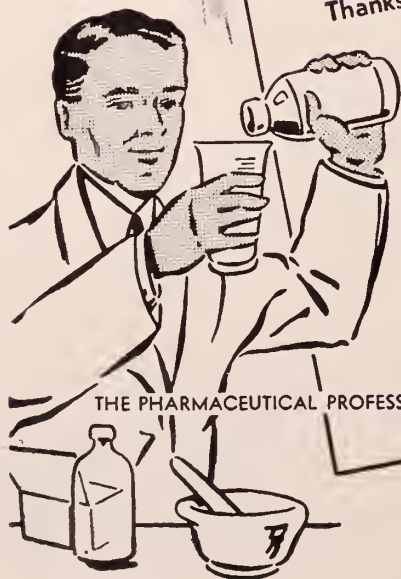
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cover such activities as State and County Fairs, Grade, High School and College Essay Contests, Orations on Health subjects and the preparation of health literature that could be distributed through lay organizations such as Blue Cross, O.P.S., Labor groups, Farm organizations, Women's and Men's Clubs, etc.

D. PUBLIC SPEAKING: This activity in public relations is of tremendous value only if well done and properly sponsored and presented. Taking a realistic attitude we must admit that few doctors of medicine have an inclination to this field of public service or the time and facilities for proper research. It would be your Committee's recommendation that a sub-committee working in this field should prepare a small number of talks on current health subjects that in turn could be given to selected members of the Association geographically located over the State, who, in turn would be willing to give of their time in appearing before lay audiences in their respective areas. The greatest danger that is inherent in public speaking is the ability of the speaker to cope with questions from an audience and the giving of press interviews. Your Committee would recommend as a starting point the preparing of a minimum of four speeches covering the following subjects: Socialized Medicine; Prepaid Hospital and Medical Care Plans; Advancements in Medicine; and Public Health Problems. Your Committee would repeat that proper personnel to do this phase of public relations is perhaps the most difficult phase.

E. PROFESSIONAL RELATIONS: There is probably no field of public relations more important to the medical profession than the every day contact the profession makes with the public. By the same token this phase is one of the most sadly neglected. Your Committee feels that the profession would do well to study its conduct in this field. Your Committee would suggest that a sub-committee promoting this phase of public relations would do well to study and promote activity in the following subjects. Office management, this to include the proper training of office assistants, etc.; Office physical appointments; Rendering of bills — turning of accounts to collection agencies; Public service on civic committees, etc.; House and County calls, etc. Here again is the problem of study and proper presentation.

F. VISUAL EDUCATION: The use of movies either silent or sound for educational purposes has taken a prominent place in the field of public relations. Few schools are now without proper equipment and very few communities cannot produce projection equipment from some source. While the production of original script would no doubt be too costly and outside the ability of the Association, there, nevertheless, is a wealth of such material available from the A.M.A., U.S.P.H.S., Cancer Society and such organizations. The sub-committee on visual education would be responsible for screening available material and its promotion.

G. WOMEN'S AUXILIARY: During the past two years the Auxiliary in Oklahoma has made rapid progress and today is in the process of organizing additional county units. The Auxiliary should be brought into this entire public relations program.

SUMMARY: Your Committee would call to the attention of the Council that following the action of the House of Delegates in raising the dues \$20.00 and the setting aside of this raise will be for public relations work and will give the Public Policy Committee in the neighborhood of \$25,000.00 a year on which to operate. If the Council adopts this recommendation your Committee feels that at a future date after the sub-commit-

tees have met and considered their problems that each sub-committee should draw up an operating budget and the Council in turn should authorize an appropriation to each sub-committee. Obviously this recommendation if adopted will call for a tremendous amount of work on the part of the Executive Office and consideration will probably have to be given to an analysis of the present work of that office for possible curtailment of some present activities.

NUMBER OF WOMEN IN VA HOSPITALS INCREASES

The number of women veteran-patients in Veterans Administration hospitals has nearly doubled during the past 15 months it was reported by Dr. C. H. Beasley, director of VA medical service for the Arkansas, Kansas, Missouri and Oklahoma branch area.

Tuberculosis claimed the highest number of women veterans with psychotics, other neuropsychiatric disorders, general medical and surgical patients ranking in that order. Women veterans are eligible for the same medical care as male veterans. They are granted outpatient treatment and hospitalization in VA hospitals for service-connected disabilities and also for non-service connected ailments, providing a bed is available.

ILLINOIS SETS UP LOAN PLAN TO TRAIN COUNTRY DOCTORS

A plan has been inaugurated in Illinois to finance medical education for farm boys to increase the supply of doctors in rural areas, it was announced by the Illinois State Medical society and the Illinois Agricultural association, co-sponsors of the plan.

The medical training plan is based on a fund to be established by a contribution of \$5,000 each by the two organizations. The \$10,000 total will then serve as a revolving loan bank from which loans will be made to accepted medical students at the rate of \$1,000 a year to a maximum of \$5,000 per student.

Students seeking loans under the plan must conform to certain requirements with the principal condition being that each must agree to return to a town of less than 5,000 population (the smaller the better) in his home county and practice general medicine, not a specialty.

ONE OUT OF THREE AMERICANS HAVE HEALTH INSURANCE

One person in three now carries voluntary health insurance according to facts recently released by "Insurance Economics Surveys," which is a monthly review of the social security scene prepared by the Insurance Economics Society of America.

Total enrollments reported by all voluntary health plans — commercial and non profit, group and individual — top the 61 million mark, the publication states. Even a liberal allowance for overlapping still leads to the conclusion that about one American in every three now has some form of insurance against sickness costs.

"Insurance Economics Surveys" attribute this to the change in the average citizen's social position and the fact that many have moved from small communities to larger cities where they are not so close to their daily bread. Illness spelled economic calamity unless some pool could be tapped as individual budgeting proved inadequate.

RETURN OF CARDS URGED FOR HOME TOWN MEDICAL PROGRAM

All members of the Oklahoma State Medical Association are urged to return their cards on the Veterans Home Town Medical Care Program so that it will facilitate actual operation of the program as soon as possible. February 15 has been set as the deadline for all cards to be returned.

Instructions and application cards were mailed out the first of January to all members of the Association and by our February Journal deadline date approximately 400 of these had been returned. Of these, 195 indicated they want to do general work and 198 indicated various specialties as their preference. It is important that every physician participate in this program so that coverage from the entire state may be obtained. The program will not go into operation until all sections of the state are represented.

The program is designed so that veterans can receive the best medical care possible in their home town for service connected disabilities. All physicians' fees are paid by the Veterans Administration if prior authorization has been obtained.

The state has been divided into two regional districts with Muskogee serving Osage, Pawnee, Creek, Okfuskee, Hughes, Coal, Atoka, and Bryan counties and the remainder of the counties east. Oklahoma City is the regional office serving all counties west.

TULSA BOARD OF EDUCATION ADOPTS HEALTH INSURANCE

Tulsa's Board of Education in a special session January 14, 1948, adopted a plan of prepaid health insurance for board employees. Delaying previous approval was the filing of a suit by Layne Perry, osteopath, who had alleged that an adoption of the Blue Cross Hospital plan would discriminate against members of his profession. The suit was dropped after consultation with the board when they provided an option for employees to select other types of insurance if desired.

The Blue Cross program provides for payments totaling \$10,955.60 each three months for approximately 16,000 employees.

It is anticipated that a majority of school board employees will select the Blue Cross program but they may select other insurance providing the benefits under the other plans are substantially equivalent to Blue Cross and cost no more.

THIRTY-ONE BEDS ARE RE-OPENED AT UNIVERSITY HOSPITAL

On January 20, 1948, a group of 31 beds were opened at the University Hospital. These beds are for surgical patients. This is the first group of beds to be reopened since the shut-down due to insufficient funds in the spring of 1946.

At the January meeting, the faculty adopted the recommendations of a special committee appointed to study changes in departmental administration. Under the new plan each clinical department will operate under a chairman who is selected by the deans and the advisory board from nominations submitted by department mem-

bers. The chairman will serve for a two-year period and may succeed himself. A vice chairman will be selected a similar method. Each department will meet at least once a month and will report each meeting to the associate dean of faculty, and at these meetings will consider problems of curriculum, clerkship, intern and resident training and other departmental business. Departments will make recommendations as to new appointments, and promotion; these recommendations will be based on service, ability, accomplishment and tenure.

A tumor clinic was opened late in January at the University Hospitals under the direction of Henry G. Bennett, Jr., M.D., Oklahoma City. Money for operation of the clinic is being furnished by the Oklahoma Division of the American Cancer Society and the Cancer Division of the Oklahoma State Health Department. The School of Medicine will furnish consultants, personnel and space for the tumor clinic. This clinic will coordinate the activities of all hospital departments in the diagnosis, treatment and study of all cancer patients referred to the University Hospital. Plans are being made for setting up a similar clinic in Tulsa at St. John's Hospital.

Plans are underway for a thorough revision of all graduate education and research at the School of Medicine. At present a Master of Science degree is offered in each of the basic sciences. It is hoped to extend graduate work for the master's degree to the clinical fields.

The building program consisting of a new nursing home, an additional wing, and power-house addition are well along toward completion. Occupancy of the nursing home and hospital wing are expected within two months. Physical improvements and a reorganization of present facilities are being made in the outpatient department which will permit a more efficient handling of patients.

MEDICAL SERVICE SOCIETY TO ASSIST O.S.M.A.

A committee was appointed to investigate projects pertaining to service to the medical profession that could be carried out by the Oklahoma City chapter of the Medical Service Society at the regular meeting of the group held in Oklahoma City in January.

The Medical Service Society is an organization of detail men representing pharmaceutical houses. W. W. Rucks, Jr., M.D., president of the Oklahoma County Medical Society, has been selected as honorary medical sponsor of the group. Officers of the society for 1948 are Frank Cotten, president, G. D. Searle and Co.; Sam Mays, vice-president, William S. Merrill and Co.; H. G. Archerd, treasurer, Burrows-Wellcome and Co.; and Sam Wilson, secretary, E. R. Squibb and Co.

In addition to other business at the meeting, the Medical Service Society pledged \$1,000.00 to the Oklahoma Medical Research Foundation. Reprints of advertising and publicity sent out by the OSMA are also distributed to doctors' offices, hospitals, and drug stores as a project of the society.

ENGAGEMENT ANNOUNCED

The engagement of Russel L. Kuntz, M.D., 224 W. Cherokee St., Nowata, Oklahoma, and Mrs. Helen Gudgel, 405 Seneca St., Bartlesville, Oklahoma, is announced.

The wedding will take place in early spring and the couple is planning a wedding trip in Texas and Louisiana.

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OKLAHOMA MEDICAL RESEARCH FOUNDATION GIFTS GROW

That More May Live Longer



In the pledge report for the year 1947 issued on December 31 by the Oklahoma Medical Research Foundation the doctors of medicine were still \$96,900 short of their goal. Quota set up for the physicians of the state for the soon-to-be-constructed \$3,000,000 Research Foundation is \$525,000.

Total number of doctors who contributed to the foundation according to the end of the year report was 449.

Among the other groups listed in the pledge report and the amounts they contributed in 1947 and the total amount pledged are: dentists, \$7,755 of their goal of \$255,000; pharmacists, \$43,895 of their goal of \$300,000; nurses, \$13,802 of their goal of \$50,000, and general, \$672,452 of the \$870,000 goal.

THERAPEUTIC ABORTION LEGALITY IS CLARIFIED

In answer to a request for information "is therapeutic abortion legal?" the following has been issued as an interpretation of the statutes of Oklahoma relative to this question by the attorney for the State Board of Medical Examiners:

Title 21, O.S. 1941, Sections 713, 714 and 861:

"713. Killing an unborn quick child. The wilful killing of an unborn quick child by any injury committed upon the person of the mother of such child, and not prohibited in the next following section, is manslaughter in the first degree.

"714. Procuring destruction of unborn child. Every person who administers to any woman pregnant with a quick child, or who prescribes for such woman, or advises or procures any such woman to take any medicine, drug or substance whatever, or who uses or employs any instrument or other means with intent thereby to destroy such child, unless the same shall have been necessary to preserve the life of such mother, is guilty in case the death of the child or of the mother is thereby produced, of manslaughter in the first degree.

"861. Procuring an abortion. Every person who administers to any pregnant woman, or who prescribes for any such woman, or advises or procures any such woman to take any medicine, drug or substance, or uses or employs any instrument, or other means whatever, with intent thereby to procure the miscarriage of such woman, unless the same is necessary to preserve her life, is punishable by imprisonment in the penitentiary not exceeding three years, or in a county jail not exceeding one year."

Since the above is a negative provision, it is always advisable (although not absolutely necessary) for any doctor before performing a therapeutic abortion to hold consultation with at least one other doctor or preferably more and obtain their affirmative opinion that the abortion is necessary to preserve the life of the mother.

PUBLIC RELATIONS MAN NAMED BY AMA

Serving as assistant in charge of public relations to George F. Lull, M.D., Secretary and General Manager of the A.M.A., Lawrence W. Rember assumed his duties during December.

Rember formerly directed public relations for the Blue Cross plan commission of the American Hospital Association and the 17-state midwestern area of the American National Red Cross. He has served as assistant general manager of the public relations nutrition research agency of three billion dollar food industry, representing 28 national and regional trade associations. He worked with a newspaper five years and an advertising agency two years.

He graduated "Cum Laude" from the University of Wisconsin and Northwestern University, obtaining his bachelor of arts degree from the former and his master of science from the latter. He specialized in journalism and commerce, and supplemented this education by teaching journalism and advertising at the University of Georgia. He is a member of the national association of Public Relations Counsel, Sigma Delta Chi, honorary journalism fraternity, and the Headline Club of Chicago.

CONTRIBUTIONS ASKED

February, 1948, has been set as the month in which the American people will be asked to contribute to the AOA-UAC (American Overseas Aid-United Nations Appeal for Children). Contributions will provide the following services: food, medical care, medicines, clothing, shelter, rehabilitation, education, training of workers in emergency fields. National Headquarters are at 39 Broadway, New York 5, New York. Goal for the month of February has been set at \$60,000,000.

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ANNOUNCEMENTS

PHYSICAL MEDICINE COURSE TO BE HELD IN TEXAS

Physicians, hospital administrators and qualified physical and occupational therapy technicians are also invited to attend a course in physical medicine and rehabilitation of to be held March 1-5 at the University of Texas Medical Branch, Galveston, Texas.

The course will include instruction in the theory and technic of application of the various physical agents, and will emphasize the practical clinical aspects to physical medicine as well as recent development in this field. Demonstrations and motion pictures will also be given. For further information regarding the course write W. A. Selle, M.D., Director of Postgraduate Course in Physical Medicine, University of Texas, Medical Branch.

CIVILIAN PHYSICIANS MAY NOW BECOME COMMISSIONED OFFICERS

Civilian doctors may now become commissioned officers in the regular navy, provided they meet the professional and physical qualifications contained in public law 365, 80th Congress, title II. This law is unique in that it does away with, for the first time, the age limitation of 32 years of age and permits physicians in civilian practice to enter the navy and be commissioned with the rank up to and including captain.

In order to make application a physician must be a citizen of the United States, a graduate from a class "A" medical school and have served at least one year's internship in an approved hospital. Candidates will then be judged on a number of other qualifications.

HEALTH DEPARTMENT HAS OPENINGS

Several openings with opportunities for advancement as directors of full time local health departments in Oklahoma have been announced by the State Department of Health. Starting salary is \$500 a month plus earned travel and after one or two years' service, medical officers are eligible for a year's scholarship at one of the schools of public health at three-fourths salary plus tuition.

Work is primarily administrative in nature including activities such as acute communicable disease control, tuberculosis control, venereal disease control, the conducting of maternity and of child health conference

and school health services and the supervision of sanitation activities, milk control and restaurant sanitation.

Any physician who would like to have a position with the health department on July 1 or earlier is asked to contact G. F. Mathews, M.D., Commissioner of Health, State Department of Health, 3400 North Eastern, Oklahoma City 5, Okla.

POSTGRADUATE COURSE IN CHEST DISEASES SLATED

The American College of Chest Physicians, Pennsylvania chapter, and the Laennec society of Philadelphia are sponsoring a postgraduate course in diseases of the chest to be held during the week of March 15-20, 1948, at the Warwick hotel, Philadelphia. Emphasis in this course will be placed on the newer developments in all aspects of diagnosis and treatment of diseases of the chest. Further information may be secured from the office of the American College of Chest Physicians, 500 North Dearborn St., Chicago 10, Illinois.

25 YEARS AGO

Oklmulgee County Medical Society at the last January meeting formed plans to have a club room and medical library. The meeting was the annual "get together" affair of the society. The viands for the occasion were provided by Drs. W. W. Stark, W. C. Vernon and L. E. Torrance. The twenty-one physicians present heard a radio program after the meeting.

Dr. G. S. Barter, of Shawnee, has just completed a handsome new residence "out on Broadway" and is now living therein.

Dr. H. E. Huston, Cherokee, has moved to Watonga.

Dr. Robert S. Love, Oklahoma City, claims to be the champion victim in a contest when it comes to who lost most. Recently, while attending a banquet, thieves drilled through his locked car door and stole more than \$6,000 worth of radium. Four days later they finished their operations by stealing the car.

Dr. J. E. Arrington, Frederick, has been appointed health officer for Tillman County.

Dr. W. T. Mayfield, Norman, and Miss Delores Burrell, Santa Anna, California, were married in January.

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BOOK REVIEWS

THE TREATMENT OF DIABETES MELLITUS. Elliott P. Joslin, A.M., M.D., Sc.D. Eighth edition. 861 pages, illustrated. Price \$10.00. Philadelphia: Lea and Febiger, 1946.

The eighth edition of Joslin's textbook on the treatment of diabetes remains, more than ever, the medical profession's bible on this disease. This book, published during the 25th anniversary of the discovery of insulin, is encyclopedic in its scope and contains a storehouse of facts on all aspects of the diabetic problem.

The chapters on treatment are written in simple, logical, and easily followed language. These chapters are divided into three categories: The first is devoted to those patients who can be handled in the physician's office. The second is for those who need readjustment or inauguration of treatment in nursing homes or less expensive hospital beds. The third is for those with complications who require hospital care. The problem of diet is made simple so that they can be calculated with ease. The book is as valuable to the general practitioner as it is to the internist who specializes in this disease.

Dr. Joslin's long experience, covering 48 years, and the handling of some 29,000 diabetics entitles him to the expression of dogmatic views. The reader cannot help but be impressed though with the exhaustive number of quotations and the references of other workers whose viewpoint, though a conflicting one, has been so sincerely quoted and respected. This attitude gives to the book a broadness of viewpoint and expression which many other textbooks lack.

The life expectancy of diabetics has risen from 44 to 64 years. With this increase in life span the diabetic finds himself subject to a multitude of complications. These complications are taken up one by one, a chapter being devoted to each. To accomplish this, the senior author has called upon his well-known specialist associates, Drs. Root, Marble, White and Bailey.

Every physician who is called upon to treat diabetes should have this book in his own or a readily available library for reference—A. W. Wallace, M.D.

CANCER DIAGNOSIS, TREATMENT AND PROGNOSIS. Lauren V. Ackerman, M.D., and Juan A. del Regato, M.D. 1115 pages. 745 text illustrations and 42 color reproductions. C. V. Mosby Company. St. Louis, Mo. 1947. Price \$20.00.

I believe that this is the most concise and best written text on the subject of cancer available today. It is unique in its method of presentation in that the subject of cancer is covered thoroughly from present day research problems to the latest therapy. It is a book that every member of the medical profession should have regardless of the phase of cancer in which he might be interested. The pathologist is at a disadvantage without the knowledge of the clinical aspects of cancer, and the clinician is at a disadvantage without the knowledge of pathology. This text brings the entire problem of cancer together for the mutual benefit of all fields.

The first portion of this book deals with the problem of cancer in general. This includes research, pathology, and the various methods of therapy. The second portion of this book deals with the problem of cancer by systems. Each system is covered methodically in the following order: anatomy, incidence, etiology, gross and microscopic pathology, clinical evolution, diagnosis, differential diagnosis, treatment, and prognosis.

This text reads like a storybook and the 745 illustrations and 42 color plates are large and excellent. Details of therapeutic techniques which are of interest to only the informed specialist are omitted. The treatments which may be considered are discussed and the treatment of choice is stressed. The opinions presented are not just those of the two authors but are the general opinions of outstanding specialists in cancer over the country. A very ample bibliography is presented at the end of each chapter.

I feel that this book is the finest presentation on cancer available at this time and that it should be in the library of every doctor who sees cancer in any of its aspects.—Everett B. Neff, M.D.

TEXTBOOK OF CLINICAL NEUROLOGY. I. S. Wechsler, M.D., Sixth edition. 829 pages. 162 illustrations. Philadelphia and London. W. B. Saunders Company, 1947. Price \$8.50.

This sixth edition of Wechsler's Clinical Neurology comes out some 20 years after the first edition of the textbook, and some four years following the fifth edition. This is still the same sound neurological textbook that it has always been, with additions made to cover more recent advances in the treatment of certain neurological diseases. In addition, the chapter on psychometric tests has been rewritten and changed to "Psychological Diagnoses."

Several new illustrations have been added to replace the older ones, and new references have been added.

This is an excellent presentation of clinical neurology, for the medical student and the practicing physician.—Jess D. Herrmann, M.D.

ANNUAL MEETING

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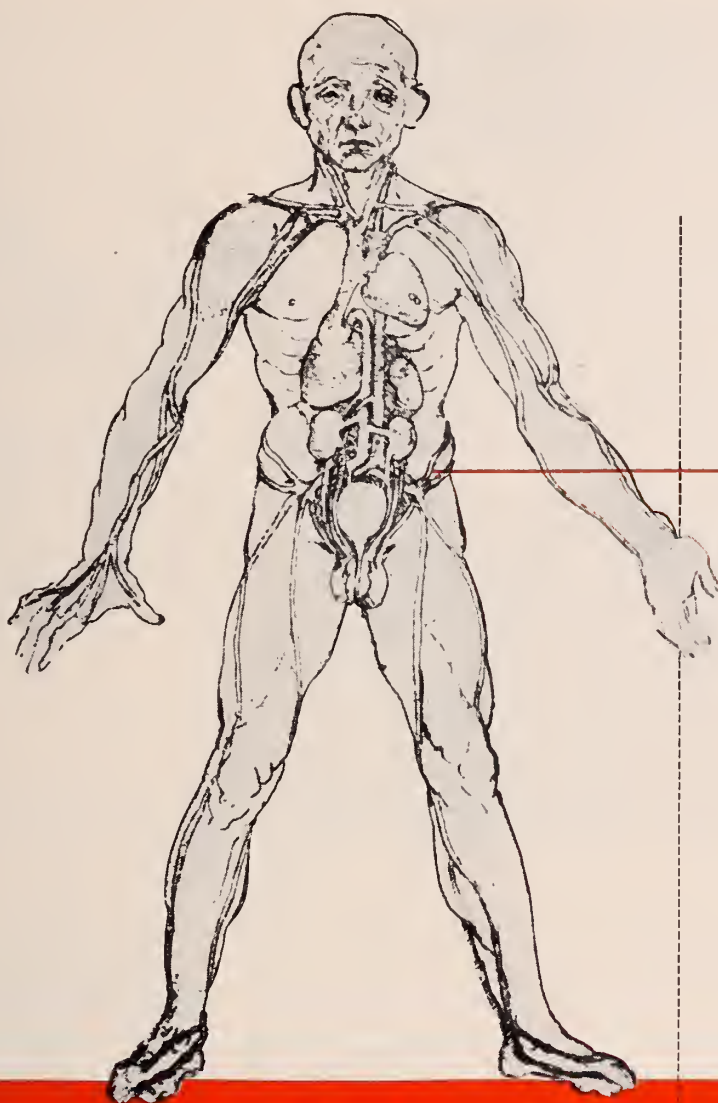


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HAVE YOU HEARD?

At a recent meeting of the Elk City chamber of commerce reports were given by various committees. Among those reporting for their committees were *V. C. Tisdal, Jr., M.D.*, agricultural.

Dwight Pierson, M.D., Mangum, has been invited to attend an infantile paralysis diagnosis clinic in an eastern hospital under sponsorship of the National Infantile Paralysis foundation.

C. Riley Strong, M.D., Elk City, told the Kiwanis club of that city about the new treatment for infantile paralysis that combines the Sister Kenney heat packs to relax the muscles and other methods. Dr. Strong has recently returned from Pittsburg where he took special training in the disease in the D. T. Watson Home for Crippled Children.

William F. LaFon, M.D., has been named vice-president of the American Business Club of Alva for the next six months. *David J. Shepherd, M.D.*, is president of the organization.

Two new physicians have been added to the Veterans hospital at Muskogee. They are *Capt. Marvin B. Hayes*, formerly of Vinita and a graduate of the University of Oklahoma School of Medicine, who has been assigned to the hospital and *James A. Atkins, M.D.*, formerly of Lamar, Mo. *Capt. Hayes* is the son of *P. L. Hayes, M.D.*, of the Eastern Oklahoma Hospital staff at Vinita.

D. L. Mathews, M.D., Tonkawa, was guest speaker of the evening with pediatrics as his subject when the eighth district nurses' association met in Tonkawa in January.

Two Wichita Falls physicians were guest speakers for the regular monthly meeting of the *Jackson County Medical Society* meeting held in January in Altus. *Harry Ledbetter, M.D.*, delivered a paper on industrial injuries of the hand and *William Powers, M.D.*, spoke on recent advancements in treatment of heart diseases.

DO YOU KNOW?

That *Richard G. Stoll, M.D.*, Chickasha, passed the test for membership in the American Board of Surgery. The test was taken about the middle of December in New Orleans. He is a graduate of the Western Reserve medical school and served his internship in the Cleveland city hospital.

Other OSMA members certified by the American Board of Surgery are: *Harold McKinley McClure, M.D.*, Chickasha; *Louis J. Kennedy, M.D.*, Clinton; *John Fish Park, M.D.*, McAlester; *William P. Fite, M.D.*, Muskogee; *Austin H. Bell, M.D.*, Oklahoma City; *Herbert D. Collins, M.D.*, Oklahoma City; *Clifford C. Fulton, M.D.*, Oklahoma City; *Robert M. Howard, M.D.*, Oklahoma City; *LeRoy D. Long, M.D.*, Oklahoma City; *Raymond L. Murdoch, M.D.*, Oklahoma City; *Charles M. O'Leary, M.D.*, Oklahoma City; *Horace Reed, M.D.*, Oklahoma City; *Victor K. Allen, M.D.*, Tulsa; *Frank L. Flack, M.D.*, Tulsa; *Davy Lewis Garrett, M.D.*, Tulsa; *Gifford Harold Henry, M.D.*, Tulsa, and *Everett Neff, M.D.*, Oklahoma City.



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OBITUARIES

Roy Alvin Zink, M.D. 1894-1947

Roy Alvin Zink, M.D., died December 12 at his home in Tulsa of an accidental gunshot wound.

Dr. Zink graduated from the Missouri School of Medicine in 1918 and specialized in internal medicine.

He was a member of the Tulsa County Medical Society and a fellow of the American Medical Association.

Frank LeRoy Carson, M.D. 1882-1947

Frank LeRoy Carson, M.D., Shawnee, died unexpectedly December 19 at his home.

Dr. Carson was the last member of a trio of Shawnee physicians who formed a partnership in 1917 to found the ACH Clinic and who built the ACH Hospital in 1927. Dr. R. M. Anderson died July 13, 1942 and Dr. J. E. Hughes died January 15, 1946.

Dr. Carson was born in Wakeeney, Kansas, but had lived in Pottawatomie county since he was six years old. He received his degree from the University of Oklahoma School of Pharmacy in 1900 and received his degree in medicine from Tulane University, New Orleans, in 1904. His internship was at Charity Hospital, New Orleans.

A fellow of the American Medical Association, he had also been a member of the American College of Surgeons since 1917 and of the American Board of Surgery since 1938. He was serving as chief surgeon of the ACH, as visiting surgeon at Shawnee City Hospital and consultant surgeon of Shawnee Indian Sanatorium at the time of his death. A captain in World War I, he was a member of the American Legion of Shawnee lodge 107, A.F. and A.M.

He is survived by his widow, two sons, J. M. Carson, M.D., also associated with the ACH, and R. W. Carson, Freeport, Tex., two daughters, Mrs. L. P. Henry, Wellesley, Mass., and Mrs. J. K. Henderson, Shreveport, La. Seven grandchildren and a sister, Mrs. Ida McKeown, Cushing, also survive.

HAVE YOU HEARD?

Aaron C. Little, M.D., Minco, has been awarded the bronze star medal for meritorious service as regimental surgeon serving with the third marine division during operations against the Japanese forces on Iwo Jima from February 24 to March 15, 1945.

Ollie McBride, M.D., Ada, is chapter chairman for Pontotoc county for the National Foundation for Infantile Paralysis.

R. D. Turner, M.D., Muskogee, addressed the Muskogee branch of the American Association of University Women recently on "Treatment of War Neurosis."

Ralph Phelan, M.D., Hobart, spoke on "The Army and the Nurses" at the fifth district meeting of the Oklahoma State Nurses Association held in Hobart. Dr. Phelan explained the various phases of army nursing. At the meeting, it was also announced that Oklahoma nurses had pledged \$50,000 to the million dollar Oklahoma Medical Research Foundation.

M. T. Moorehead, M.D., Ardmore, is the new surgeon at the Hardy sanitarium, Ardmore. His father practiced medicine 50 years in one Ohio county and his brother is practicing in Ohio now. He will be associated with *Walter Hardy, M.D.*

Vernon C. Merrifield, M.D., Ponca City, was recently nominated for the board of directors of the American Business club at Ponca City.

W. B. (Bill) Mullins, M.D., has resigned his position as a member of the staff of the ACH clinic and hospital at Shawnee and will be associated with a pediatrician at Amarillo, Texas. *Robert LeHew, M.D.*, former physician at Oklahoma A. and M. college and an army doctor, will succeed Dr. Mullins.

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THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

POLICY, POLITICS, POWER

Policy

Accepting Webster's definition let us consider policy as representative of "Prudence or wisdom in the management of public and private affairs" as they relate to medicine. It is believed that a poll of the members of the Oklahoma State Medical Association would unanimously reveal opposition to the administration's policy of compulsory health insurance. This opposition is based upon the fact that this policy deftly bypasses both "prudence and wisdom."

Politics

Again according to Webster politics equals "the science and art of government . . . in a bad sense, artful or dishonest management to secure the success of political candidates or parties." In Washington the science and art of government is being employed by some of the bureaucrats and representatives in a "bad sense." With an election in the offing it's a good time for politicians to employ the human interest medical sob-stuff to influence individual and group voting. It's time for the medical profession to stand guard in behalf of the people who still believe in free enterprise.

Power

Mr. Webster says power is the "ability whether physical, mental, or moral to act; . . . the possession of sway or controlling influence over others, . . ." Admitting that we have a policy and that we face politics in the "bad sense" why not exercise the power which is ours. Believe it or not the politicians have an ear for power at the grass roots, too often silent, or latent yet powerfully potential. In keeping with our policy and our knowledge of bad politics why not unleash the dogs at the grassroots and employ to the fullest this potential. Individual letters, independently penned, and obviously pyramided on the desks of our representatives', including that of the President, will bring uneasy nights and possibly change of policy to designing politicians and uninformed representatives in Washington. It is important to reach the President be-

cause he is listening to the hardened bureaucrats who have little regard for the welfare of the people. Through long practice, physicians have learned to sweeten the truth but in this emergency it's time to make it bitter as gall.

The pen must follow the policy of our members 100 per cent to be effective.* Voltaire, with no greater provocation, once said "I have no ceptor but I have a pen." It is high time for us to make libations to the Father of Medicine and supplement our prayers with reasonable yet forceful demands. Even the member of the medical profession whose hand is becoming palsied should push his pen to the point of final expression in behalf of the high calling which has claimed his life. Every physician in the state should forget personal interests long enough to *do this* one thing for his country.

*Names, districts they represent, and Washington addresses of congressmen from Oklahoma are as follows:

Rep. Oras A. Shaw, District One, House of Representatives, Washington, D. C.

Rep. Bill Stigler, District Two, House of Representatives, Washington, D. C.

Rep. Carl Albert, District Three, House of Representatives, Washington, D. C.

Rep. Glen Johnson, District Four, House of Representatives, Washington, D. C.

Rep. Mike Monroney, District Five, House of Representatives, Washington, D. C.

Rep. Toby Morris, District Six, House of Representatives, Washington, D. C.

Rep. Preston Paden, District Seven, House of Representatives, Washington, D. C.

Rep. Ross Rizley, District Eight, House of Representatives, Washington, D. C.

Correspondence addressed to Sen. E. H. Moore and Sen. Elmer Thomas should be sent to the Senate Office Building, Washington, D. C.

PUBLIC RELATIONS

Every member of the State Medical Association should be keenly aware of the activities of the Association through the Public

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Policy Committee, the executive staff and various sub-committees. By action of the House of Delegates the dues were increased for public relations and the proposed program has had Council approval. It is now time for unanimous approval and concerted action on the part of the membership. Even those who deplore the increase in dues and felt the void when they came up with the cash, should go to work and make the investment pay off.

It is doubtful if any other state in the union has such a praiseworthy program. A widely-publicized program failing for want of execution becomes a curse. This ambitious, humanitarian undertaking must not fail. The integrity of the state association is at stake; the medical profession is on trial; its right to exist as a free enterprise is being challenged by the present administration, its agencies, and bureaus. Again, we must volunteer to fight the people's war. Even the members of the profession just back from the late world conflict must resume their armor and fight for freedom.

The physician who is requested to participate in this program, in any capacity, cannot afford to make excuses. He must accept the torch and sound the battle cry. Failure now to retrieve what we have lost in public esteem means ultimate ruin. Those who receive no official assignment are expected to employ every possible means to restore the old time patient-doctor relationship. If this relationship had not been neglected by practicing physicians we would not now find it necessary to pay and work for better public relations.

MORE OF FALK AND HIS ILK

The Senate committee on labor and public welfare resume hearings and again rouse the bureaucratic skunks. What a stench the New Deal has spawned in the most beautiful city in the world. Washington needs washing.

In the A.M.A. Special Bulletin No. 13 issued January 30 it is stated that Mr. Falk "Under cross-examination by Senator Donnell, stated that he had been interested in compulsory health insurance for many years, and he had delivered addresses and written articles in books on the subject long before he took a position with the Federal Social Security Administration. He stated that he had assisted Senators Wagner and Murray in the preparation of their several bills, supplying them with data and also aiding in drafting.

"No special point was made aside from Senator Donnell's establishing the fact that Mr. Falk's main interest in all of the positions he has occupied has been to advance compulsory health insurance. He was followed by his assistant, Wilbur Cohen, who gave a complete statement of the Mission to Japan. (Senator Murray, in cross-examining Mr. Cohen, called it the "Mission to Moscow.")

"He brought with him photostatic copies of all correspondence and tried to show that the idea of the Mission originated with the Japanese in their effort to restore their social security program, which was established originally in the 1920's. In cross-examination, Senator Donnell established the fact that Mr. Cohen, in selecting the personnel of the commission, did not overlook the fact that those who went should be well informed with Mr. Falk's ideas on welfare and health insurance.

"Mr. Cohen, in response to inquiry as to the manner in which the President secured his information for his initial message to the Congress urging health insurance, admitted that he and Mr. Falk had supplied much of that information — both through communications and through visits to the personnel in the White House who drafted the message. On specific questioning, he stated that the message was drafted by Judge Samuel Rosenman."

The President of the United States insults an interested doctor by accusing him of not knowing what it's all about while he bases his compulsory health insurance policy upon advice from Falk and Cohen. The high points in the development of this disgraceful plot against individual liberty and free enterprise from the time of Mr. Altmeyer's speech in Chicago, two years ago, to the present Senate Committee exposures, are to be found in the editorial columns of this Journal.

Finally, when Senator H. Alexander Smith wrote to the governors of 48 states asking : . . "What States would approve a compulsory tax plan such as S.1320 calls for, with a Government supervised medical service, or What States would prefer the S.545 plan, (Robert Taft) leaving to the States the determination of policy—that is, compulsory or voluntary group health plans, etc;" a member of the Journal editorial staff dispatched a letter to Senator Smith with the following inquiry — "I am wondering if you would consider the feasibility of giving the Governors of each state a third choice and pose a question like this: "What states would

prefer to have no part in any health plan proposed and subsidized by the U. S. government?" A copy of the letter was sent to the governor of Oklahoma. The tabulated responses to Senator Smith's letter recently reported shows that Oklahoma stands proudly among the five states "not in favor of either bill." It is heartening to note that only one state favored S.1320. While we are pleased with the stand our state has taken the doctors who have not written their representatives have no cause for pride. It is impossible to believe that good doctors, with the welfare of their people at heart, could stand by and let the den of skunks in the national capital stir up such a stink without remonstrance.

Returning to Mr. Altmyer, social security administrator, and his undemocratic policies we quote Samuel B. Pettengill's editorial "\$80,000,000 Rathole." "We discovered that practically every argument, every pamphlet, every radio broadcast and every statistical table advocating socialized medicine originated primarily in the Social Security Board. . . . Here is the world-wide nerve center of the movement for socialized medicine." We might add here is the nucleus for dictatorship. Again quoting from Pettengill . . . "I am sure," he says, "that the United States has not yet reached the point where it must be submissive to the dictates of a bureaucracy in Washington."

James Byrnes, who is in the "know," says in his book, *Speaking Frankly*, "The nearest approach to immortality on this earth is a government bureau."

If we cannot amortize the social security board we can emasculate it with the pen. Every physician in the state should write the President and Oklahoma's representatives protesting the threat of compulsory health insurance.

A. D. A. FORECAST

A sample copy of the American Diabetes Association's "A.D.A. Forecast" has been received for review. This attractive monthly is "designed to extend the doctor's influence" in the discovery and management of diabetes. It is both educational and inspirational and should be an aid to all physicians who manage diabetics and to all who suffer from this one time deadly — now disciplinary disease.

In the dispensing of medical knowledge to the layman in special fields, there is always danger of confusing the patient and disturbing the patient-doctor relationship. But the announcement wisely offers this assurance for those who may raise the question, "An advisory editorial board on which are American Diabetes Association members who know from experience what the doctor wants his diabetic patient to know will pass on all material before it appears. In this way the physician is assured of only the most acceptable reading matter falling into the hands of his patients."

A.D.A. sponsoring this magazine is attempting to do for diabetics what the National Tuberculosis Association has done for those suffering from tuberculosis.

MEET OUR CONTRIBUTORS

W. F. Thomas, M.D., F.A.C.S., Tulsa, is the author of "Pelvic Thrombophlebitis" appearing in this issue of the Journal. Dr. Thomas graduated from the Tulane School of Medicine in 1937. His specialties are obstetrics and gynecology and he has been certified by the American Board of Obstetrics and Gynecology.

Fred D. Switzer, M.D., E.E.N.T., Hugo, has an article "Present Day Management of Trachoma" appearing in the March issue of the Journal. A graduate of the University of Oklahoma in 1936, Dr. Switzer was in the army in 1940 and 1941, and served his E.E.N.T. residence at Grace Hospital, Detroit, Michigan, in 1942-1943. He is secretary of the Tri-County (Choctaw, McCurtain, Pushmataha) Medical Society.

Harry C. Ford, M.D., A.B., B.S., F.A.C.S., Oklahoma City, wrote "Treatment of Mastoiditis" in this issue. Dr. Ford's specialty is otolaryngology and he is a member of the American Academy of Ophthalmology

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W. F. Lewis, M.D., Lawton, is the author of "Congenital Renal Anomalies and Their Complications" in the March issue of the Journal. He was graduated from the University of Oklahoma in 1939 and specializes in urology. He has served on the following committees: Judicial and Public Relations Committee, Medical Advisory Committee to the Department of Public Welfare.

Joseph Fulcher's, M.D., Tulsa, article entitled "Leiomyosarcoma of the Urinary Bladder" is in this Journal. A graduate of the University of Tennessee in 1926 he specializes in urology. He is a member of the American Urological Association and the South Central Urological Association and has been certified by the American Board of Urology.

SCIENTIFIC ARTICLES

LEIOMYOSARCOMA OF THE URINARY BLADDER*

JOSEPH FULCHER, M.D.

TULSA, OKLAHOMA

It is common knowledge that leiomyomas occur wherever smooth muscle is found. Small nodular leiomyomas are found in the kidney substance and in the wall of the intestine. The wall of the uterus is a common site for the finding of myomas with a large amount of connective tissue. These tumors are usually benign.

In the wall of the urinary bladder there are found on rare occasions small tumors made up of cells of the parent smooth muscle. These are also usually benign. It was once my experience to encounter a smooth muscle tumor of the urinary bladder wall which was malignant. This paper concerns that incident. The literature upon the subject of leiomyosarcoma has been thoroughly covered in recent years.²

Therefore, it is my purpose to briefly discuss the condition and report and add one more case to the small existing group.

Upon reviewing some of the writings during the past 20 years, one finds various reports in regard to the incidence of leiomyosarcoma of the urinary bladder. There has been until recently, a great amount of trouble in classifying them and differentiating them. Phosphotungstic acid stain has been a great help in making the differential diagnosis. In 1938 Ashburn and Wollenweber¹ reported that there were at that time four authenticated cases of leiomyosarcoma of the urinary bladder. They added a report of a case of their own. Most of the information to be found upon this subject however, is by Kretschmer.² In 1939 he reported having found records of 13 cases and he and Doerhing added another to their own. To this series another case was added in 1939 by Munger.⁴ There is very little to be found in standard textbooks upon the subject.

The case reported herewith is that of a pure (unmixed) leiomyosarcoma of the urinary bladder. It is authenticated by gross and microscopic study.

REPORT OF A CASE

M.K.S., a 56-year-old colored male was admitted to Moton Memorial Hospital, Tulsa, Oklahoma, on February 22, 1941. His chief complaints were those of frequency, dysuria, nocturia, two to four times, weakness and loss of weight. The symptoms were of a duration of nearly nine months. He had taken various home remedies without results.

Physical examination revealed nothing of particular interest. There was a residual urine of five ounces. The non-protein nitrogen was 43 Mgm. per cent. The prostate was smooth, coarsely nodular and appeared to be about a third degree benign enlargement. The urine contained one plus albumin, and 15-20 pus cells per high power field.

He was put upon retention catheter drainage, fluids were forced and his general condition improved. The progress was slow. Upon April 13, 1941, a perineal prostatectomy was done. The enlarged prostate was enucleated successfully but there was a remaining tumor mass in the region of the trigone. The bladder was pulled down and this mass was removed as well as could be, but some of it remained in the bladder wall. The original mass appeared to be about two by four by six centimeters. It was flattened anterior-posterior and was apparently infiltrating the bladder wall, and extending into the bladder cavity. The bladder neck was sutured, the incision was closed. The patient recovered from the operation and was discharged from the hospital on May 12, 1941.

After leaving the hospital he developed a perineal fistula, began to lose weight and was re-admitted 41 days later. His condition progressively grew worse. He had incontinence of feces and urine. There was a tumor in the pelvis which could be palpated in the suprapubic region. It was spherical, firm and immovable. He was emaciated, ran a temperature from 99.6 to 102.3 and on July 2, 1941, he died.

An autopsy was performed. There was found to be an acute peritonitis present with

*Presented before the Section on Surgery of the Oklahoma State Medical Association at the Annual Meeting, May 15, 1947.

exudate. There was necrosis of the anterior, lower abdominal wall. There was a very hard mass filling almost all of the pelvis and it was firmly attached. It was contained in the wall of the bladder which it had displaced upward and anteriorly. There was a fistulous tract extending through this mass to the perineum and necrosis along the tract throughout its length. The tumor itself was dense, somewhat homogenous and cut with some difficulty. On cut section it had the appearance of a pale fibromyomata of the uterus. There was a pericarditis present with a blood tinged effusion. There were some tuberculous areas present in the lungs, these

were removed for microscopic study. Metastases were found in the lungs, liver and kidney. The ureters were markedly dilated. The right kidney was about one-fourth the size of a normal kidney. The issue was examined by I. A. Nelson, M.D., of St. John's Hospital, Tulsa, Oklahoma. Microscopic studies revealed the primary tumor mass to be a leiomyosarcoma of the urinary bladder, with metastases as above mentioned.

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CONGENITAL RENAL ANOMALIES AND THEIR COMPLICATIONS*

W. F. LEWIS, M.D.

LAWTON, OKLAHOMA

During embryological development the bulk of the renal parenchyma arises from a part of the lateral cell mass in the region of the pelvis. At about the end of the ninth week the kidneys ascend and rotate to assume their normal position in the lumbar region. This process of migration and rotation affords ample opportunity for arrest in both development and position, giving rise to the variety of congenital lesions found in the study of urological patients.

Anomalies in the upper urinary tract are more commonly observed than in any other system of the body. While it is true that every such anomaly or congenital malformation does not constitute a pathological lesion or entity, it is nevertheless to be assumed, from the tremendous amount of clinical data in hand, as well as from the many post-mortem findings that practically every congenital malformation of the upper urinary tract is potentially a clinico-pathological entity liable ultimately, for lack of function, to become a surgical problem. So amazing is the role of the vast number of anomalies of the urinary tract in the formation of diseases and pathological lesions, that it can safely be said that fully 40 per cent of all pathological conditions of the kidneys and ureters are due to congenital anomalies.

By studying the development of the system, one can easily understand the reasons for the great number and wide diversity of types of congenital malformations that are encountered in the upper urinary tract.

Using modern urological procedures it is possible to demonstrate previously unrecognized pathological conditions, particularly in children who have been suffering with so-called chronic pyuria or relapsing attacks of pyelitis or nephritis, the underlying cause of the trouble having been an overlooked congenital malformation of the urinary system.

Only the congenital anomalies of the upper urinary tract will be considered in this paper. The classification, as outlined by Dr. Robert Gutierrez, of the anomalies of the kidney proper, will be discussed individually along with some of the complications accompanying the anomalies.

I. ANOMALIES OF NUMBER

- (a) Absence of both kidneys
- (b) Absence of one kidney (solitary kidney)
- (c) Double or multiple kidney (Unilateral — bilateral)
- (d) Supernumerary Kidney

II. ANOMALIES OF SIZE

- (a) Hypoplastic (true renal—renal aplasia)

*Presented before the Section on Surgery of the Oklahoma State Medical Association at the Annual Meeting, May 15, 1947.

- (b) Hyperplastic (lobulated—compensated)

III. ANOMALIES OF FORM

- (a) Long kidney
- (b) Short kidney
- (c) Broad kidney
- (d) Lobulated kidney
- (e) Cystic kidney (universal—bilateral)
- (f) Polycystic kidney (unilateral—bilateral)
- (g) Fused kidney
 1. Asymmetric (L-shaped—sigmoid—ring shaped)
 2. Symmetric (horseshoe kidney)

IV. ANOMALIES OF POSITION

- (a) Movable or floating kidney (unilateral—bilateral)
- (b) Ectopic kidney
 1. Simple unilateral
 2. Simple bilateral
 3. Bilateral with fusion
 4. Crossed with or without fusion

V. ANOMALIES OF ROTATION

- (a) Deficient rotation
- (b) Excessive rotation

CONGENITAL ABSENCE OF BOTH KIDNEYS is obviously a malformation which is incompatible with extra-uterine life and for this reason has no clinical interest, except as an embryological defect.

CONGENITAL ABSENCE OF ONE KIDNEY — CONGENITAL SOLITARY KIDNEY — is a condition found about once in every 1000 cases. These cases show a complete absence of a mate with hypertrophy of the solitary kidney, and in some cases may fail to migrate to its normal position in the lumbar area; this represents a true ectopic kidney. If the kidney remains near the site of origin in the pelvis, its future is certainly insecure. The emptying capacity of such kidneys is usually poor so that hydronephrosis and infection eventually lead to severe damage and reduction of function. Such kidneys in a woman would interfere with normal gestation. Solitary ectopic kidneys have been removed as pelvic tumors during gynecological operations. Solitary kidneys in the normal position in the lumbar area have also been removed because of acute pathological condition without examination to determine the existence or absence of the kidney on the opposite side. These accidents are followed by death from uremia in from one to three weeks. The life expectancy of a

person with a solitary kidney in the normal position has been debatable, but in my short experience I have found that life is not shortened. I have a 77-year-old patient with a congenital solitary kidney which has had two large calculi removed from is about 10 years ago, who is still very active in business and social activities.

TRUE SUPERNUMERARY KIDNEYS are very rare; less than 50 cases having been reported in literature. The abnormal kidney is usually located below the normal kidney and is subject to any pathology found in a normal organ.

DOUBLE OR MULTIPLE KIDNEYS are the most common of all renal anomalies. Reduplication of the renal pelvis and ureter may be unilateral or bilateral, and are subject to as many, if not a few more, complications as is a normal kidney. One of the most interesting cases reporting to our clinic was a 66-year-old man who had a double kidney on his left and a triple kidney on the right with five complete ureters opening into the bladder. They were asymptomatic and found through routine intravenous pyelograms on all surgical cases.

THE HYPOPLASTIC KIDNEY: In true unilateral renal hypoplasia, we have a small infantile kidney, which may either be apparently well developed anatomically and histologically, or defectively developed in its internal cell structure. They are more susceptible to infection than are normal kidneys, and once they become infected they usually remain so because of the inability to concentrate urinary antiseptics in sufficient strength to kill organisms. Nephrectomy is usually resorted to in diseased cases. A patient with a hypoplastic kidney falls into exactly the same group as those with a solitary kidney since the hypoplastic kidney is insufficient of supporting life alone. These kidneys lack the ability to undergo functional hypertrophy if the opposite organ has been surgically removed. Gutierrez states that the occurrence of any important anomaly in the female genital tract suggests enormous probability that there is a congenital aplasia or hypoplasia of one kidney. I have found this true in two cases recently, where there was a maldevelopment of a tube and ovary on one side, associated with an absence of the kidney on the same side.

Hypertension in a person with this type of anomaly is a very frequent occurrence and in my experiences the high blood pressure has been relieved by removal of the ab-

normal kidney. It my opinion surgical exploration for and removal of such kidneys are indicated under the following circumstances: (1) for the relief of pain; (2) in patients with intractable hypertension and no evidence of disease of the functioning kidney; (3) in cases of hypertension where pyelonephritic contracture or renal hypoplasia cannot be excluded.

CYSTIC KIDNEY: Solitary cysts of the kidney may be unilateral or bilateral. They are seldom discovered except during routine examinations or at autopsy, since they are not apt to cause symptoms or do little harm. Their chief importance lies in the fact that they must be differentiated from malignant cortical tumors. They occur in the same age group and produce the same deformity in the pyelograms. Just recently I had a 42-year-old white female come into the hospital with severe gross hematuria, and left ureteral colic. Intravenous urograms showed a defect in the left pelvic three to four cm. in diameter with distortion of the calyces. When the kidney was exposed a solitary cyst was found projecting into and almost completely obliterating the renal penal pelvis. These cysts may be either aspiration or surgically removed. A cyst located at either pole of the kidney may be resected and the remaining portion of the kidney preserved while those centrally located and multilocular often require nephrectomy.

POLYCYSTIC KIDNEYS: Congenital polycystic disease is, with rare exceptions bilateral. The kidneys are filled with multiple cysts varying from a fraction of a millimeter to several centimeters in diameter. The cysts are filled with a watery serous fluid. Faulty development leads to the formation of blind tubules which become distended with the fluid. The cysts are found in both the cortex and medulla and constantly encroach upon the functioning capacity of the kidney. The disease has been proven to be congenital since it is found in the fetus and very young children. There seems to be a definite hereditary tendency with several members of the same family afflicted. It usually becomes symptomatic during the fourth decade and few live through the fifth. Clinical manifestations include pain, which may be the result of the weight of the mass itself, hemorrhage into the cyst or infection, and in addition all symptoms associated with progressive renal failure. There is an associated hypertension in approximately one-half of the cases. The

diagnosis is made from the physical findings and confirmed by roentgenography of the upper urinary tract. Most all of the cases are sooner or later complicated by infection, hemorrhage into the cyst or renal pelvis and may lead to surgical intervention. Nephrectomy should never be performed except in those cases where hemorrhage or pain cannot be controlled otherwise. The rupturing of the cyst and phenolizing the mucosa is used more recently to control these symptoms temporarily. A very rare complication is malignancy of the polycystic kidney. In the past few days I was visited by a patient whom I had removed a large papillary adenocarcinoma from three years ago. He was still well and healthy. Another interesting case was that of a 29-year-old white male who had been rejected from the army because of microscopic hematuria, later to be accepted and spend two years overseas without signs or symptoms of renal pathology. After returning home he reported to my office with gross hematuria and elevated blood pressure. Urograms revealed bilateral polycystic kidney disease. The hemorrhage did not stop until he had spent three weeks at bed rest.

FUSED KIDNEYS: In fused kidneys, we have a condition resulting from a union of the two kidneys' blastemata in early fetal life, which manifests itself in a fused organ that may assume any one of a large number of different shapes, and may be asymmetric with reference to the middle of the body. The various types of fusion open opportunity for endless variations in the number and disposition of ureters and kidney pelvises. The blood supply may come from anywhere, irrespective of all rules. Usually fused kidneys do not ascend as high as normal kidneys. This is explained by the fact that the fusion itself constitutes an obstruction which impedes the ascent. This circumstance not only is responsible for many of the painful disturbances with which such patients suffer but also at operation robs the surgeon of important landmarks that would serve as guides under normal conditions. Most important of all the forms of fused kidneys, and especially of symmetric fused kidney, is the horseshoe kidney. This is formed by fusion of the two kidneys across the midline. These kidneys ascend to assume their normal position in the lumbar area but fail to rotate so that the pelvis is anterior and with few exceptions the calices point toward the midline. The isthmus connecting the two is usually composed of renal paren-

chyma and in the majority of cases fusion is at the lower poles. Pressure of the isthmus upon the mesenteric vessels and nerves may produce chronic gastro-intestinal symptoms which may require section for relief. About two months ago a 41-year-old white robust male came to my office with the history of a continuous backache for years. This had become progressively worse and was not relieved after a left pyelolithotomy three years previously by his local surgeon. Other symptoms include urgency and frequency of urination and nocturia. For the past two years he had been unable to do any type of work without severe back pain. Urinalysis revealed grade I pyuria and one plus albumin. Intravenous urograms showed a horseshoe kidney with a grade II hydronephrosis of the left half of the kidney. Retrograde pyelograms showed a definite left uretero-pelvic junction obstruction, which was apparently extrinsic. The calyces projected laterally as in a normal kidney except the lower, which projected toward the isthmus. At operation we found an aberrant blood vessel obstructing the uretero-pelvic junction. The isthmus was incised and sutured, releasing the right kidney, the aberrant vessel ligated and incised and the portion of the kidney supplied by this vessel was removed. Five weeks later the patient returned to the office free from symptoms other than slight generalized weakness. Other complications I have encountered in these cases have been gross hematuria and chronic pyelonephritis.

NEPHROPTOSIS: (MOVABLE OR FLOATING KIDNEY) Movable kidney is the term used to designate a kidney that is abnormally movable beyond the limits of the natural diaphragmatic excursions of this organ, caused by respiratory movements of the body. Although not truly a congenital anomaly there must be a congenital predisposition of this condition. The movable kidney is found in young children, however, complications seldom arise sufficient to cause symptoms until the late teens or twenties. Asthenia, debilitating diseases, childbirth, trauma from falls or blows are all common causes of increasing the excursion of the organ and thus complications such as ureteral kinks, hydronephrosis, pyelonephritis, and nephrolithiasis. "What to do with a nephroptotic kidney?" has been debated for years. The most recent trend and the one I follow is to do a nephropexy, preferably the type described by Dr. Deming, in which the kidney is not fixed firmly but supported by

a hammock made from the anterior renal fascia (Gerota's Fascia). Nephropexy is certainly not done for every movable kidney. Surgery is indicated when palliative measures have failed, when there is a retention of urine in the renal pelvis, when there are repeated attacks of pyelonephritis and when the patient has sufficient pain from the condition to prevent his normal activities.

ECTOPIC KIDNEY: Ectopia of the kidney is one of the most frequent of renal anomalies. They present special surgical problems because of the abnormal position and relationship of the kidney and because of the abnormal blood supply. The blood vessels arise from and enter the nearest large vessel, usually the aorta and vena cava at a lower than normal level, but in some cases the iliac vessels. Ectopic kidneys are usually incompletely rotated so that the pelvis of the kidney occupies an anterior position. The patients are subject to abdominal discomfort which may be attributed to the renal mass being in an abnormal position with aberrant vessels causing obstruction in the urinary flow. Interference with the normal pyeloureteral dynamics due to malformation, obstruction, poor drainage, and even torsion in rare cases, is productive of pain. However, oftentimes the condition is entirely asymptomatic and is only discovered by routine examination. Complications resulting from the cases in which obstruction of the ureter is found are: (1) hydronephrosis, (2) pyelonephritis, and (3) calculi. If both kidneys are involved early death is common from infection and uremia.

SUMMARY

Malformations of the kidneys are of great clinical importance and account for about 40 per cent of all pathological conditions associated with these organs. The signs and symptoms of their complications should be more familiar to each of us so that the "overlooking" of important pathological diseases may be minimized. Since congenital anomalies definitely predispose to disease, it is believed that only by early diagnosis and treatment can a good many of these complications be prevented or ameliorated.

MAKE RESERVATIONS NOW!

ANNUAL MEETING

May 17-19

Skirvin Hotel

Oklahoma City, Oklahoma

PRESENT DAY MANAGEMENT OF TRACHOMA*

FRED D. SWITZER, M.D.

HUGO, OKLAHOMA

There is perhaps more difference of opinion about the treatment of trachoma than any other disease, and though it has now been 10 years since sulfonamide therapy was first used in these cases there is still little uniformity of opinion as to the actual results obtained. We can still argue at great length as to whether any of these cases are ever actually cured, and though I certainly am not setting myself up as an authority I still feel that the committee reporting on trachoma to the American Medical Association was probably correct in suggesting that the disease in its terminal stages should be thought of as being arrested rather than being cured.

In southeast Oklahoma we are still confronted with a tremendous problem in combating trachoma, but in our own county the local health unit has made steady gains during recent years in arresting the disease. During the last five years 372 cases have been reported in Choctaw County and treated by the health department using sulfanilamide both orally and locally. No other medication has been used. While these patients were actually under the care of the director of the health department, I have seen a large number of them either in school clinics or in consultation in cases of questionable diagnosis. For the most part they have fallen in stage II according to the MacCallan classification. Ninety-one cases were followed adequately to determine that they were completely arrested. Twenty-two cases relapsed and were not arrested by further treatment. One hundred ten cases showed definite improvement but were not followed long enough to determine the final outcome. The other 149 patients were never seen after the first visit at which time the diagnosis had been made.

Whether the method of using only sul-

fonamides is best could be debated endlessly but in reviewing the literature one finds some agreement in the increasing tendency to discard the older and more painful procedures. I agree wholeheartedly with Forster, Sorsby, Marks, Gallaher, and others in asserting that the copper stick has absolutely no place in modern practice. Better results can be obtained by less painful methods and in private practice one can hardly expect the patient to return very many times only to be confronted with this instrument of torture.

In administering the sulfonamides it is usually necessary to maintain a blood level of only three to five mg. per cent or a dosage of $\frac{1}{3}$ to $\frac{1}{2}$ grains per pound body weight per day prescribed with an equal amount of sodium bicarbonate. Sulfanilamide and sulfadiazine are equally effective. Administration is usually continued for about 21 days, a second similar course being given patients not arrested by the first. Forster states that this mode of treatment was adopted routinely at the Ft. Apache Trachoma School in 1937 and that all cases treated were completely arrested. However, Spring claims that improvement occurs only during the first 10 days and that further administration is useless. In his excellent report on an unusually large series Gradle has shown that in cases given sulfonamide therapy twice as many eyes show definite improvement in vision, and less than half as many eyes show positive losses in vision as when given purely local treatment.

Thygeson feels that the sulfonamides act primarily upon the trachoma virus with uniform disappearance of the epithelial cell inclusion bodies characteristic of the active disease. On the other hand Marks, who has likely seen as many trachomatous children as anyone during the last 25 years, has some very definite ideas to the contrary. He recently has stated that while the sulfonamides

*Presented before the Section on Surgery of the Oklahoma State Medical Association at the Annual Meeting, May 16, 1947.

orally are wonderful in dealing with secondary infection they do not deal with the trachoma. He insists that cleanliness, time and general health are most important in the cure and that many cases have been arrested with nothing more than boric acid for medication. However, it is difficult to accept this statement completely when we remember the terrific toll in loss of vision exacted by the disease before the advent of sulfanilamide, though we do admit that many cases have become arrested without any treatment at all and without too great damage.

Among those who feel that sulfonamide therapy alone is not sufficient, there is little agreement as to what supplementary procedures are best. Expression of the follicles and grattage are still endorsed by many and in some cases are probably necessary. Sorsby feels that treatment is enhanced by grattage as well as subsequent use of silver or other metallic salts. Sorsby advocates full sulfonamide therapy and expression as well as subsequent applications of 30 per cent sodium sulfacetamide ointment. Cooper claims that the only complete treatment is preventing a high percentage of recurrences is sulfanilamide therapy followed by ionization with quinine bisulphate. Still others use zinc sulphate, sulfanilamide powder locally, and vitamin A both locally and orally as adjuncts to treatment.

Reports on the use of penicillin in the treatment of trachoma are rather discouraging. While some investigators have used it successfully it evidently has no advantage over sulfonamides and is possibly less reliable. When it is used the method of choice is local instillation, 500 units penicillin per cc. of water instilled every 30 minutes that the patient is awake. To do this practically requires hospitalization for little result may be expected from home treatment when medication will be overlooked more times than administered. Thygeson reports that in the few cases in which he has used penicillin the results have been disappointing but that these patients cleared up quickly when changed to sulfonamides. On the other hand he found that patients who had not responded to the sulfonamides also showed no improvement with penicillin.

Nothing has been contributed in the past few years to the surgical treatment of trachoma other than slight refinement of some of the older techniques. As already mentioned expression is sometimes necessary when granules are few and well developed. In

cases with abundant granulation dessication or grattage may be done, the latter still being the most common operation used in trachoma surgery. Mucous membrane grafts, while lauded by some operators are condemned by others. Other surgical procedures which might be considered are tarsectomy, complete or partial, with or without mucous membrane grafting; peritomy as a treatment for pannus; canthotomy to enlarge the field for operation; and cautery puncture and the various plastic techniques for entropion.

I would like to include a final word stressing the general health of the trachomatous child. As always in the past a large majority of cases of trachoma are found among the underprivileged, and steps should be taken to correct malnutrition when it is found to exist among these patients. Here public health nursing can do wonders in preventing the spread of the disease to other members of the family by establishing sanitary safeguards in the home. It is also a serious public health responsibility in following up these cases more carefully in the future. This has not been possible in the past due to lack of personnel and large territorial assignment, but when the time comes that each county can have its own adequately staffed full time health unit these patients should be followed as persistently as we are now pursuing our V-D patients.

CONCLUSIONS

1. Ten years of sulfonamide therapy in trachoma has produced no uniformity of opinion as to permanent cures but has convinced most authorities that this is the most effective drug group available in combating the disease.
2. A sulfonamide blood level of three to five mg. per cent for 21 days will completely arrest the vast majority of cases.
3. It is necessary to supplement drug therapy in some cases with expression, grattage, or other surgical procedures.
4. Penicillin has proven to be less effective than sulfonamides in experiments up to this time.
5. Malnutrition and general health must not be overlooked in treating trachomatous children.
6. When possible public health agencies must follow up known cases more persistently in the future.

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TREATMENT OF MASTOIDITIS*

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A few years ago mastoiditis was a comparatively simple condition. The patient progressed through a more or less well defined course, which might be interrupted by recovery at any point, until the stage of acute mastoiditis was reached when the only procedure open was immediate surgery. Granted, there were occasional serious complications, usually the result of neglect or faulty judgment, but, for the most part, these also resulted in recovery following adequate surgery. It seems to me that during recent years the problem has become more complicated.

In the first place, every patient, child or adult, who develops an acute otitis is immediately placed on some form of chemotherapy, antibiotics, or a combination. Most of these recover with a dry ear and normal hearing in a period varying from a few days to a few weeks. In some cases acute mastoiditis develops, but the so-called conservative treatment is continued in an attempt to avoid surgery. This is a most important point, because we have all seen acute mastoiditis recover without surgery before the days of penicillin and sulfa drugs so why shouldn't some recover now. It is only natural, in view of the generally wonderful results with these drugs, to accord them full credit for the cure in all cases. I think this assumption is wrong. It has been shown repeatedly that continuation of these drugs produces masking of symptoms so that extension of the pathology is not recognized until complications appear. Consequently, we no longer see simple, acute mastoiditis. It is usually mastoiditis compli-

cated by intracranial extension, and the complication frequently is the first recognizable sign of trouble beyond the limits of the middle ear.

It is true that we see fewer cases of mastoiditis than formerly, but also fewer cases of suppurative otitis media because of the effectiveness of these drugs in the acute general infections. Scarlet fever, for instance, now has a much lower incidence of complicating otitis media, and probably, in those cases in which it does develop, the virulence of the organism has been attenuated enough that it remains confined to the middle ear. We know that in order for these drugs to be effective the concentration via the blood stream must be adequate and maintained, and the blood supply to middle ear and mastoid is as poor as anywhere in the body.

The literature concerning the local use of penicillin, streptomycin and the sulfa drugs is confusing. Loeb reports excellent results in acute otitis media with penicillin drops. Krauss, who instilled it in the middle ear by means of the pneumatic otoscope, thinks it shortens the duration a few days. Most authors are agreed that if mastoiditis develops, the place for the new drugs is in the immediate pre and postoperative care. My own observations have led me to believe that in most cases the sulfa drugs and penicillin both locally and systemically are of little value in either acute otitis media or mastoiditis. In recent years I have had occasion to treat many cases of otitis media most of which had sulfa drugs prior to myringotomy.

*Presented before the Section on Surgery of the Oklahoma State Medical Association at the Annual Meeting, May 14, 1947.

The time required for the healing was essentially the same in those in which sulfa and penicillin were continued and in those who received nothing but cleansing. The greatest difference was that in those who had no treatment an occasional case of acute mastoiditis developed. In those who continued on treatment an occasional complicated mastoiditis developed. In addition, it has been mentioned that frequently sulfa drugs result in unresolved exudates with plastic processes within the middle ear, and permanent impairment of hearing.

My personal observations have not agreed with some of the glowing reports from army hospitals on the efficacy of this treatment.

Chronic mastoiditis is also essentially surgical. I am not including cases of chronic otitis media which may be occasionally cured by other methods. In my limited experience I have never seen a chronic mastoid cured by medical means, and I have seen several develop the most severe unsuspected complications. I have in mind a case of recent months who, although in the hospital under observation and the most intensive treatment, developed extradural abscess, extensive lateral sinus thrombosis, and intrasinal abscess. The chronic case in which pathology is limited to attic and aditus may be cured and hearing preserved by the modified radical operation, but with extensive middle ear disease the classic radical operation is necessary. In the case of a small posterior, superior marginal perforation with foul smelling, seropurulent discharge, the dangers are so great and the chance for improvement, without surgery, so slight, that the radical mastoid operation is almost imperative. It

should be unnecessary to mention that the surgery should be thorough, and that the preferred result is a dry ear as well as a safe one.

I am sure too much emphasis has been placed upon avoiding mastoid surgery. Certainly a simple mastoidectomy is to be preferred over one with intracranial complications. If the acute ear is treated by methods which are known to mask dangerous symptoms, then by all means they should be discontinued at intervals and the symptoms allowed to become evident. It also follows that our reasoning is not quite right if we avoid surgery for the moment, but leave the patient with a chronically discharging ear which ultimately results in deafness, radical surgery, intracranial extension or all combined. Neither ear nor patient is damaged by a well done simple mastoidectomy. Both are sometimes irreparably damaged by its omission.

To summarize, in one sentence; the treatment of mastoiditis is, with few exceptions, surgical.

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JOURNAL CONTRIBUTOR NOW DOING RESEARCH IN JAPAN

Donald B. McMullen, Sc.D., whose article "Treatment of Parasitic Infection Common in Oklahoma" appeared in the July issue of the Journal of the Oklahoma State Medical Association, is now with the 406th medical general laboratory, section on medical zoology (APO 500, c/o Postmaster, San Francisco) in Japan.

Dr. McMullen writes that his laboratory is located in a good building in downtown Tokyo. "The facilities are palatial compared to what we had in the Philippines and Japan in 1945. The laboratory has sections in pathology, virus and rickettsia, bacteriology, chemistry, serology, and medical zoology. I am in the latter. The Commanding Officer is Col. W. D. Tigertt, formerly at Baylor and an American board man in pathology. Our organization is primarily interested in research but is also used as a 'court of final authority,' training of

personnel, and getting Japanese scientists and medical men back into productive channels," according to his letter.

He also writes "My primary reason for returning was that I might be able to take up the schistosomiasis problem where it was dropped in 1945. This hope has been realized and I am working with men at the Japanese national institute of health and the public health department in the Yamanashi prefecture. Yamanashi is the worst endemic center in Japan and is only about 100 miles from Tokyo. It is one of their major medical problems, with about half of the population infected. A good part of my time is spent out in the field. The program is one that deals primarily with the epidemiology of the disease. Besides schistosomiasis we see practically everything one hears about in medical school. This helps give one some valuable experience."

PELVIC THROMBOPHLEBITIS*

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In discussing pelvic thrombophlebitis it is imperative to differentiate between three types of venous thrombosis. (1) Phlebotrombosis, in which the clot in the vein is a bland, non-inflammatory process occurring as a result of two factors. (a) A predisposing factor consisting of increased coagulability of the blood, caused by tissue damage, and (b) a precipitating one consisting of circulatory stasis which determines the site of the thrombus. (2) Thrombophlebitis, with its firmly attached white clot, occurring as a result of an inflammatory process in the vein wall and (3), suppurative thrombophlebitis in which the infected thrombus undergoes suppurative liquification and gives rise to septic emboli into the blood stream. It is this infectious phenomenon as related to the pelvis proper that we will discuss in this paper.

Because of its frequency as a cause of prolonged convalescence and serious complications, including death, suppurative thrombophlebitis of the pelvic veins is of much interest and importance to the gynecologist and obstetrician. This condition is most frequently found in cases of puerperal sepsis (either post abortal or post partal) although it may follow the application of radium to the female genitals, operations on the female genital tract, and suppurative processes in the adnexa.

During the period July 1, 1937, to January 1, 1946, of 32,198 patients exclusive of abortions admitted to the gynecological wards of Charity Hospital in New Orleans, 536 died, 50 or 9.3 per cent showed intravascular clotting in the pelvic veins. In 12 instances bland clotting or phlebotrombosis was present and followed all types of gynecological operations. Eleven were associated with cul de sac or tubo-ovarian abscesses. During the same period there were 44,027 deliveries in the same institution and 6,314 cases of abor-

tion. In the former, there were 194 deaths and in the latter 70. At autopsy 35 per cent showed intravascular clotting of the pelvic veins in the cases dying from puerperal sepsis.

Hysterectomy is undoubtedly the operation most frequently followed by pelvic thrombophlebitis. Abortion, operative deliveries, particularly those associated with retained products of pregnancy, irradiation, pelvic infection associated with cul de sac and tubo-ovarian abscesses, where the patient is confined to bed for a long period with a suppurative process in intimate relation with the large pelvic veins are predisposing factors.

A definite diagnosis of suppurative pelvic thrombophlebitis is fairly difficult to make. Other causes of chills and/or fever must first be eliminated. A history of operation, abortion, delivery, or application of radium is usually obtained. The patient's pulse, temperature, and respiration must be closely followed. If spiking fever and chills are present, less difficulty is encountered, but all patients do not show these characteristic signs and symptoms. In occasional cases a plateau-like temperature curve is found, and the chills may be absent. A fairly constant finding is an elevated pulse and a patient who does not look as sick as the findings would indicate. On vaginal examination, little or no exudate is found in the parametrial areas, and, occasionally one can feel the thrombosed vein, but this is not a constant finding. Thrombosed veins should be looked for not only in the parametrial area, but along the whole vaginal wall. It has been reported by Collins that 85 per cent of these cases have infarction into the lung and that all lung infarcts do not produce the typical pleural pain and bloody sputum, but can be silent. Any patient not responding readily to conservative therapy deserves a chest plate to determine if infarcts are present. Blood cultures are of value if the result

*Presented before the Section on Surgery of the Oklahoma State Medical Association at the Annual Meeting, May 16, 1947.

is positive, especially in determining whether or not the organism is penicillin-resistant or sulfa-fast. However, if negative, it in no way rules out the presence of suppurative thrombophlebitis.

The prevention of pelvic thrombophlebitis embodies the principles of good surgical technique, general care of the patient with the restoration of blood loss and it is hoped that early ambulation will prevent many of these cases. Of course, many will respond readily to the sulfonamides and antibiotics we have at our command today. The early recognition and adequate drainage of cul de sac abscesses may prevent this septic type of thrombosis.

The surgical treatment of this condition is not new. The earliest surgeon to apply the method of venous ligation to gynecology was Freund, who in 1898 performed ligation and excision of the thrombosed ovarian vein. Perhaps Trendelenberg in 1902 was the first to perform the procedure successfully in a case of puerperal infection. At the first operation he ligated the hypogastric vein, but because the patient continued to have chills, he performed a second operation and ligated the ovarian. It is interesting to observe that at that time Trendelenberg expressed the opinion that vena cava ligation should not be considered because if thrombosis was that extensive, the procedure would not be successful. Nine years later Trendelenberg had apparently changed his mind as he reported probably the first successful case of vena cava ligation. Proximal venous ligation in gynecologic cases received its greatest enthusiasm about 20 to 25 years ago. This procedure was very popular in Germany and there was heated controversy concerning the respective values of the transperitoneal and extra peritoneal approach as whether the operation should be done after the first or third chill. Gradually, the pendulum swung toward conservatism, and the operation began to be considered dangerous and of no value. This was due to the appalling high mortality and the poor results obtained by numerous surgeons. In his critical analysis of the subject, Krotoski justifiably directs attention to a number of factors which may have accounted for these results. The most important being that the operation was frequently performed too late, by inexperienced surgeons and not sufficiently extensive. During the recent years, the treatment of pelvic thrombophlebitis in cases that fail to respond to conservative measures had again

turned to venous ligation. We are seeing more and more reports of vena cava and ovarian vein ligation with good results.

When we review the collateral circulation after vena cava ligation we can appreciate the minimal circulatory changes in the lower extremities that occur. The collaterals can be divided into three groups:

(1) Superficial, composed of collaterals set up via the superficial epigastric and superficial circumflex iliac veins, which thus connect the saphenous flow from the lower extremities with the superficial thoracic and superficial upper abdominal wall venous drainage.

(2) Deep, composed of collaterals set up via the anastomoses of the deep (inferior) epigastric and deep circumflex iliac veins with the superior epigastric and lumbar veins, thus connecting the external iliac veins with the internal mammary veins and the ascending lumbar trunk, and finally,

(3) the ascending lumbar trunks which form a most important part of the venous collaterals after ligation of the vena cava. These trunks begin on either side of the sacral promontory where they communicate with the middle and lateral sacral veins, common iliac hypogastric and ilio lumbar veins via the anterior sacral plexus. They ascend in front of the transverse processes of the lumbar vertebrae and communicate with the lumbar veins, the vena cava inferior, and the right renal vein. The right trunk continues as the azygos vein.

In order to establish a more or less guide in the management of the cases, the following surgical procedures were adopted by the Tulane gynecological unit at Charity Hospital in New Orleans.

(a) Ligation of ovarian veins and hypogastric veins if thrombi are found in the ovarian veins and not the uterine, hypogastric, or iliac veins.

(b) Ligation of ovarian veins and inferior vena cava if thrombi are found in the ovarian veins and in the uterine, hypogastric, or iliac veins.

(c) Ligation of the ovarian veins and inferior vena cava if no thrombi are found in the ovarian veins, but are found in the uterine, hypogastric or iliac veins.

In this manner the normal venous channels from the uterus are ligated.

In conclusion the management of pelvic thrombophlebitis from a prophylactic standpoint involves minimizing surgical trauma

in pelvic procedures, restoration of blood loss, and less traumatizing manipulation at the time of delivery; early drainage of cul de sac infections, and early mobilization of the patient. Early recognition of the pelvic infection, and the use of sulfonamides and antibiotics will certainly control the majority. But in the small number where suppurative thrombophlebitis ensues, early ligation of the infected vessels is strongly suggested — care being taken to ligate proximal to the infected process in all the possible channels of flow. Vena cava ligation associated with severance of the sympathetic chain or fol-

lowed by repeated paravertebral sympathetic block with novacaine, has been proven to be an effective, safe treatment of suppurative pelvic thrombophlebitis.

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CLINICAL PATHOLOGIC CONFERENCE

The University of Oklahoma School of Medicine

Presented by the Departments of Pathology and Surgery

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DR. HOPPS: The case to be presented this morning is a very timely one, and one that will be of interest to you all; it is a diagnostic problem. There has been careful compilation and rearrangement, in chronological order, of the important events in this man's history as gathered from several sources so that the diagnostic problem is not nearly so acute as was presented to the clinician who first saw this case — e.g. the statement that the patient had had a cough and had vomited blood was not obtained until after the patient had been sick for some time and had been to six different doctors. I emphasize this point for two reasons: (1) so that you will be more cognizant of the difficulty of making a diagnosis and thus more tolerant, and (2) that you will further appreciate how important it is to take a careful history. We are fortunate in having with us Dr. Campbell who will analyze and discuss the clinical aspects of this case.

PROTOCOL

Patient: H. R., white male, age 44, admitted January 23, 1947; died February 18, 1947.

Chief Complaint: Pain in right hip and knee. Loss of weight and weakness.

Present Illness: This man was entirely well until August, 1946, when he had an attack of fever and pain in the left chest with blood tinged sputum; this persisted for three days. Then it shifted to the right side where it remained. He was treated by a local doctor for influenza and improved. In October, 1946, he had an exacerbation of his previous symptoms and at this time he noted pain in his right knee, but without swelling or redness. The muscles of the leg ached constantly. About a month later the pain spread to the right hip; there was pain on walking and some limitation of motion. The patient lost about 25 pounds in the five or six months preceding admission and there was progressive weakness.

Past History: Is essentially noncontributory except for removal of all teeth about 10 years ago and a vague history of gonorrhea.

Family History: Mother died of carcinoma of the breast.

Physical Examination: Temperature 98; pulse 84; blood pressure 110/70. The patient was well developed but showed evidence of recent weight loss. He did not appear acutely ill. The heart was regular with no murmurs. The first sound was rather rough over the

mitral area. There was a pleural friction rub in the right chest just to the right of the M.C.L. in the 5th and 6th I.S. There was some reduction in resonance over the right middle lung field. The left chest was hyperresonant in the midaxillary line with slight dullness posteriorly. There was a round, firm, freely movable node in the right supraclavicular area and slight inguinal adenopathy. The abdomen was normal as were the genitalia. The prostate was about "one time enlarged," soft and nontender. No tenderness was found on palpation of the bony pelvis and no abnormal masses were felt. The right hip showed a marked limitation of abduction, adduction and flexion with lack of muscle tone in the right thigh. The reflexes were all physiological.

Laboratory Data: Two urinalyses were essentially negative. The Mazzini test was negative. Two blood counts showed on January 23, 1947, and January 24, 1947: 12:0 and 15.0 Gm. hemoglobin; 4.3 and 3.9 million RBC's/cu.mm.; 9,400 and 12,600 WBC's/cu.mm.; with essentially normal differentials. X-ray studies on January 24, 1947, January 27, 1947, and January 28, 1948, showed some widening of the middle mediastinum, a marked destruction of the inferior ramus of the right pubic bone and destruction of the lower lip of the acetabulum — suggesting metastatic lesions of mediastinum and pelvis. Evidence of extrinsic pressure on the esophagus was also observed — thought to be due to mediastinal metastasis. K.U.B. and I.V. pyelograms revealed no evident disease in either kidney.

Clinical Course: During the week following admission the patient became hoarser, weaker, and coughed a good deal (not bloody). Palliative x-ray therapy was given, but he continued a down-hill course. On February 8, 1947, the patient developed auricular fibrillation for which he was digitalized; he was placed on the critical list. By February 11, 1947, the fibrillation was controlled: Two 250 cc. blood transfusions were given in addition to other I.V. fluids daily and morphine. Much thick sputum was being produced and this interfered with respirations. On February 17, 1947, the patient's condition became much worse; he died at 8:10 a.m. on February 18, 1947. His temperature during the last two weeks was persistently elevated to around 101 — in addition there were irregular spikes to as high as 104 degrees.

CLINICAL DIAGNOSIS

DR. CAMPBELL: Students commonly consider physical examination to be a completely objective investigation of a patient's ills. Actually, as a corollary to Dr. Hopps' remarks, the history is a direct guide to physical examination and indicates how much time and detail should be given to each system or region. Diagnosis is arrived at by a progressive elimination of various possibilities until finally only one is left. In this process, history is the first step, next physical examination and finally frequencies become involved in order that the items comprising the differential diagnosis may be evaluated as to the mathematical probability of their occurrence. Now, in a patient of this type, where hemoptysis is present, "tumor" and tuberculosis immediately predominate in one's thinking. Many other causes are possible, of course, but on the basis of mathematical probability tumor and tuberculosis must be considered most likely until another diagnosis is found. In this patient we find, late in his course, roentgenographic evidence of destructive lesions of the acetabulum, the hip and knee. Is this indicative of tuberculosis? The answer is, "No." Although tuberculous osteomyelitis occurs, one would not expect destruction of the pelvic ramus in tuberculosis. The most frequent disease involving both lung and bone in this manner is a malignant neoplasm: carcinoma of the prostate, lung, thyroid and kidney — in men — would be most likely, and in this approximate order of frequency. Carcinoma of the prostate, in its metastatic involvement of bones, is notoriously selective of bones of the pelvis and lower spine. This is probably based on retrograde venous embolism rather than on lymphatic spread. In addition, carcinoma of the prostate gets into the general systemic circulation relatively early so that metastasis to the lungs is a frequent occurrence. Most individuals with carcinoma of the prostate do not die until they have both bone and lung involvement. This can be contrasted with carcinoma of the cervix in which ureteral involvement usually leads to death from uremia before distant metastases are prominent. From the standpoint of frequency, I would say that this man had carcinoma of the prostate with metastatic involvement of the pelvis and lungs. This man's prostate was soft and enlarged about one time. If the gland were large and stony hard one would feel much more secure in the diagnosis of prostatic carcinoma. A primary carcinoma of the prostate can be small and

yet metastases may be extensive ("occult carcinoma"). I recall one patient whose chief symptom was shortness of breath. He had been taking treatment for asthma for a year and still he was short of breath. His vital capacity was greatly reduced. In spite of oxygen therapy he died of what appeared to be suffocation. At autopsy he had a very small, almost insignificant, carcinoma of the prostate, 3 mm. in diameter, with almost complete replacement of both lungs by metastatic neoplasm.

Carcinoma of the lung would certainly be next in order of consideration. We have mentioned its frequency. Against this diagnosis is the fact that skeletal involvement was limited to the pelvis. Carcinoma of the lung very commonly metastasizes to bone but one does not expect metastasis to be limited to the pelvis.

Now, what about bone tumors? Primary bone tumors, as compared with those of the stomach, prostate and lung are rare. Furthermore, the radiologist can usually make a specific diagnosis of bone sarcoma on the basis of x-ray characteristics. He comes closer to giving a "microscopic" diagnosis on bone tumors than on any other type of neoplasm. Sarcomas of bone usually metastasize to lungs early so that with these two structures involved, primary neoplasm of bone must be considered. Could a positive diagnosis have been made by making a punch biopsy from the pubic bone? Yes, and I think that in all cases of this sort, even if the patient is in extremis, an attempt should be made to adequately diagnose the case. To illustrate the possible benefit from what many might consider a needless and thus radical procedure, I recall a patient who was demonstrated to us with extensive cancer metastasis to the liver. Large nodules were readily evident upon physical examination. At autopsy this patient was found to have multiple gummata of the liver. His outlook would have been completely different had he been given the benefit of syphilotherapy. Do not close the book on any case without making a diagnosis.

CLINICAL DISCUSSION

DR. HOPPS: What then is your final diagnosis, Dr. Campbell?

DR. CAMPBELL: Carcinoma of the prostate; the second choice would have to be undifferentiated carcinoma of the lung.

DR. HOPPS: In the case of carcinoma of the prostate I understand that you are consid-

ering metastasis to the lungs. In the case of primary carcinoma of the lung why do you specify that it is an undifferentiated type?

DR. CAMPBELL: Squamous cell or adenocarcinomas do not behave in this way, but undifferentiated (round cell) carcinomas behave similarly to carcinoma of the prostate from the standpoint of regional spread and distant metastasis.

ANATOMIC DIAGNOSIS

DR. HOPPS: As a corollary to your case of multiple gummata of the liver I remember a man in extremis who, because of his condition, was "protected" from extensive physical examination. After he died it was found that he had Addison's disease. Here again had the diagnosis been made, effective and life-saving therapy would have been possible. I think that many people die because the doctor gives up. You ask a medical student assigned a patient who is in coma what did the ocular fundi show, and he says he did not look at them, that he did not wish to disturb a patient who is in a coma. Actually that is a fine time to examine the patient, since he is not liable to emotional disturbance.

This man, at death, measured five feet 11 inches and weighed approximately 100 pounds, so that there was marked emaciation. Following our usual procedure we first opened the peritoneal cavity. The inferior margin of the liver was down slightly, the mesentery was almost devoid of adipose tissue, but there was little else of significance. Next we opened the pleural cavity and on the left we found about 1000 cc. of turbid, dark bloody fluid which contained much fibrin; the pleural surfaces were shaggy, covered by fibrinous exudate. A somewhat similar appearance was seen on the right side, but only 300 cc. of fluid was found. When this fluid was removed and the pleura was carefully examined, four yellow tumor nodules, 0.5-1 cm. in diameter, were seen in the parietal pleura. The pericardial cavity was not remarkable. The heart was slightly dilated, but not of increased weight. The lungs weighed 2250 Gm. (normal 650 Gm.); the left was a little heavier and more dense than the right. Two cm. from the bifurcation of the trachea, in the right main stem bronchus, was the primary neoplasm. This was a bronchogenic carcinoma. It appeared as a firm, raised, yellow mass of tumor tissue which completely surrounded the bronchus, replacing the mucosa. As we explored further, obstruction from this tumor mass

became progressively more marked so that two or three cm. farther along the bronchus, there was complete obstruction. Distal to this point of obstruction the bronchus was filled with yellow green exudate. The mucosal surface was covered by a gray green necrotic exudate. This is a common complication of carcinoma of the lung. Clinical manifestations of carcinoma of the lung fall into two major categories and both are illustrated by this case: (1) those signs and symptoms which result from the tumor *per se*, i.e. tumor mass which may be palpated or visualized by x-ray, hemoptysis, pain — especially related to osseous metastases — cachexia and possibly fever, and (2) those signs and symptoms which are secondary to mechanical obstruction of air passages. Since carcinoma of the lung usually originates in a major bronchus, obstruction of a major bronchus occurs early in the course of the disease. Three effects may result: (a) absorption atelectasis with shift of mediastinum to the affected side, or (b) progressive emphysema with shift of mediastinum *away from* the affected side — (this occurs if the obstruction acts as a ball-valve allowing air to enter, but preventing its escape) and/or (c) infection of that part of the lung supplied by the obstructed bronchus. This may be in the form of bronchiectasis (as in this case), lung abscess or focal pneumonia. In this patient there was, in addition to the suppurative bronchitis (bronchiectasis), still another complication, a large infarct of the lower lobe. Apparently, as a result of neoplastic growth (narrowing from extrinsic pressure and subsequent thrombosis), there was complete obstruction of a major bronchial artery. Changes in the right lung were largely an effect of extensive bronchopneumonia. There was the same shaggy (fibrinous) exudate as in the left. Those were the major findings in the lungs. There had been hematogenous dissemination of tumor emboli and resultant metastatic involvement of the left suprarenal gland, right kidney, liver and, of course, the right hip and pelvis. Destruction of bone was so marked here that the involved osseous tissue could easily be cut with a knife. In addition to the involvement of hilar and mediastinal lymph nodes — incidentally, the subserosa of the esophagus was included in this, there was extensive involvement of periaortic and retroperitoneal lymph nodes. Our final anatomic diagnosis was:

Primary carcinoma of left lung, undifferentiated (Reserve cell) type arising

in main-stem bronchus

Carcinomatous metastasis to hilar, tracheal, periaortic and retroperitoneal lymph nodes; esophagus; liver; pancreas; right kidney; left adrenal; left parietal pleura; and right pubic and iliac bones

Bronchiectasis, both lower lobes, severe; with bronchitis and bronchopneumonia, acute and chronic

Hemorrhagic infarct of left lower lobe of lung

Fibrinous pleuritis, bilateral, organizing; with bilateral hemorrhagic pleural effusion

Rheumatic (?) endocarditis of mitral valve and left atrium, chronic inactive

Dilatation of right atrium and ventricle

Passive congestion of liver, spleen and kidneys, chronic

Fading infarct of spleen

Atherosclerosis of abdominal aorta and coronary arteries, moderate

Prostatic hyperplasia

Cholecystitis, chronic, with cholelithiasis

Emaciation

DISCUSSION

QUESTION: Isn't carcinoma of the prostate rare at this age?

DR. HOPPS: Yes, probabilities based upon age would be much more in favor of carcinoma of the lung. Carcinoma of the lung is most frequent in the fifth decade (40-49 years). Carcinoma of the prostate can occur at this age, but it is more frequent in the seven, eight and ninth decades.

QUESTION: What cell type was this carcinoma of the lung?

DR. HOPPS: As Dr. Campbell postulated it was an undifferentiated or so-called reserve cell carcinoma.

QUESTION: Could this have been found by bronchoscopic examination?

DR. HOPPS: In all probability, yes.

QUESTION: Would not a determination of serum phosphatase have helped in this differential diagnostic problem?

DR. HOPPS: Yes. An elevation of serum acid phosphatase would have helped greatly in making a positive diagnosis of prostatic cancer. If this value had been found to be within normal limits, it would have been strong evidence against prostatic carcinoma.

QUESTION: What was the cause of this patient's pain in the knee?

DR. CAMPBELL: Dysfunction of the hip usually first manifests itself as pain in the knee.

QUESTION: Was an acid fast stain done to rule out tuberculosis?

DR. HOPPS: No. All the pertinent information is in the mimeographed data which has been furnished to you with one exception. A supraclavicular lymph node was biopsied and the report was reserve cell carcinoma. This data was withheld but all the clinical information was given.

QUESTION: Is microscopic examination of bronchial secretions of value in diagnosing carcinoma of the lung?

DR. HOPPS: Personally, I have had little experience with this. Very recent reports are quite enthusiastic using Papanikalou's stain. It has been reported that by this means a much higher percentage of pulmonic cancers can be correctly diagnosed. Bronchoscopic examination is of course limited to the major bronchi and thus can only be expected to visualize neoplasms which lie within this rather limited range. With Papanikalou's method one examines secretions from a large area, including the periphery of the lung. In the diagnosis of cancer, proper examination of exudates or other fluids is often of very great value. The centrifuged sediment may contain obviously neoplastic cells.

QUESTION: Are you likely to spread the cancer by aspirating pleural fluid?

DR. HOPPS: If neoplastic cells are already contained in the chest fluid I do not think you can do much more damage than has been done. Dr. Campbell, I have heard you discuss removal of the pleura in these cases. Is that feasible?

DR. CAMPBELL: If carcinoma has spread to the parietal pleura and involves the ribs and intercostal spaces, wide resection of the involved portion of chest wall is possible. This procedure has been done in approximately 15 or 20 reported instances. About one-third of the patients died in 30 days, another third in another 30 days, and in another 30 days the rest were dead. The result was about the same as though nothing had been done. I have never seen an implant by thoracentesis, although rarely they do occur.

DR. HOPPS: In conclusion I should like to stress two points: (1) any man between the ages of 40 and 60 years who coughs up blood should be considered to have carcinoma of the lung until this is disproved. (2) Carcinoma of the lung is coming to be one of the most frequent carcinomas, following close in frequency after carcinoma of the stomach. It is probably the most common cancer which occurs in men during the fifth decade, excluding, of course, skin cancer.

ANNUAL MEETING HEADQUARTERS

Skirvin and Skirvin Tower Hotels

Oklahoma City, Oklahoma

ROOM RESERVATIONS

Adequate housing facilities at the leading hotels have been arranged. However, it will not be possible to house everyone in the Skirvin and Skirvin Tower. It is suggested that all those planning on attending the Annual Meeting make their hotel reservations through the Executive Office, 210 Plaza Court, Oklahoma City 3, Oklahoma, at the earliest possible date.

In making your reservations please be certain that you advise the date of your arrival, the approximate time you expect to register into the Hotel, and the date you will leave. Room reservations are cancelled at 7:00 p.m. unless a later arrival time is specified and guaranteed.

President's Page

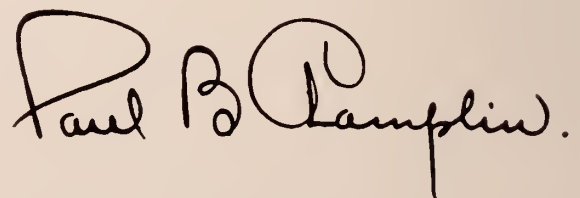
For almost two years those of us who are physicians have been conscientiously aware of the values that will come to the state of Oklahoma and its citizenry through the establishment of the Medical Research Foundation. The financial support that has been given to this program by the doctors of medicine and dentistry and the allied professions of pharmacy and nursing has been outstanding yet our work is not yet done.

Starting in February, the public at large is being asked to give financial assistance to the establishing of the Foundation and it is the obligation of all of us to see that the public knows and understands how they may personally profit.

It is unnecessary for me to reiterate the tremendous fields of research that are open. As you see your patients day by day, I know of no greater part that each of us could play in building a great state than by taking a few minutes to explain to them reasons why they should give of either their time or their worldly goods to furthering the Medical Research Foundation. Let us recognize the fact that all perhaps cannot give money but everyone can give in spirit and enthusiasm.

I know of one physician who took time with his patients to discuss this subject and received an initial gift of \$2000 which has subsequently been increased by an additional \$3000 contribution.

During the campaign among the general public, let the doctors of medicine take the lead in seeing that no question is left unanswered as to our support of this worthy cause. Remember the slogan—"That More May Live Longer."

A handwritten signature in dark ink, reading "Paul B. Champlin." The signature is written in a cursive style with a large, stylized "P" and "C".

President.



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GENERAL NEWS

REORGANIZATION INTO EFFECT AT MEDICAL SCHOOL

A new plan for departmental organization of the University of Oklahoma School of Medicine was put into effect February 14, 1948, when the university's board of regents approved a new system submitted by the medical school faculty. The main feature of the new plan is a method for the rotation of departmental chairmanships. While this idea is new to the medical school, it has been used successfully on the Norman campus for several years.

Formerly, the departmental administrator who was called "head" instead of chairman was appointed with no definite tenure of office. He was named by the dean of the medical school. Under the new plan each clinical department will nominate two or three men, and a chairman and vice-chairman will be selected from these by the dean and his advisory council. Nominations will be made every two years, thus allowing for a rotation of the chairmanship. The chairman and vice-chairman may succeed themselves. This method of selection and chairman-rotation does not apply to the smaller pre-clinical departments which include anatomy, bacteriology, biochemistry, pathology, pharmacology and physiology.

The reorganization plan also calls for monthly departmental meetings for discussion of problems relating to education of medical students, graduate training of intern and residents and other departmental business. There has been no system of regular meetings in the past. Also each department will make recommendations to the dean and his advisory council concerning new appointments to the medical school faculty and promotion of members of the faculty. There was no regular system for faculty promotion in the past.

According to Dr. Mark R. Everett, dean of the medical school, this new plan is part of a program to make the entire administration of the medical school more efficient. He said "Most of the members of the clinical faculty are physicians who are also practicing medicine in Oklahoma City. They give a large amount of their time to the medical school without pay, and should not be expected to carry the load of departmental administration for too long a time. Rotation of chairmen will spread out the burden of administrative work, and will give the members of the clinical faculty more time for research and advanced study. We think that this plan will improve the working of the entire medical school. The plan is not inflexible, and changes will be made if they prove necessary."

The first group of chairmen and vice-chairmen under the new plan are: department of dermatology and syphilology, C. P. Bondurant, M.D., chairman, John H. Lamb, M.D., vice-chairman; department of gynecology, Grider Penick, M.D., chairman, J. W. Kelso, M.D., vice-chairman; department of internal medicine, R. Q. Goodwin, M.D., chairman, W. W. Rucks, Jr., M.D., vice-chairman; department of obstetrics, J. B. Eskridge, Jr., M.D., chairman, E. N. Smith, M.D., vice-chairman; department of ophthalmology, J. P. McGee, M.D., chairman, James R. Reed, M.D., vice-chairman; department of orthopedic surgery, D. H. O'Donoghue, M.D., chairman, C. R. Rountree, M.D., vice-chairman; department of oto-rhino-laryngology, L. Chester McHenry, M.D., chairman, J. C. McDonald, M.D., vice-chairman; department of pediatrics, Clark H. Hall, M.D., chairman, Carroll M. Pounders, M.D., vice-chairman; department of

psychiatry and neurology, Coyne Campbell, M.D., chairman, Charles E. Leonard, M.D., vice-chairman; department of radiology, Peter E. Russo, M.D., chairman, W. E. Eastland, M.D., vice-chairman; department of surgery, L. J. Starry, M.D., chairman, Forrest M. Lingenfelter, M.D., vice-chairman.

TULSA IS PRESIDENT OF ANESTHESIOLOGISTS

With the election of Harold Boyd Stewart, M.D., Tulsa, as president of the American Society of Anesthesiologists, the Oklahoma State Medical Association has its first member named to the presidency of a national specialist group.

Well qualified for the position, he is one of the founders of the American Board of Anesthesiology and a member of that board from 1937 to 1946. He served as its president in 1944. From 1932 to 1935 he was president of the Southern Association of Anesthetists.

Born in 1896, Dr. Stewart graduated from the Ohio State University college of medicine in 1923 and after practicing three years in Springfield, he came to Oklahoma August 1, 1927, as chief of the department of anesthesiology at St. John's hospital in Tulsa. He was chief of staff at St. John's in 1945, and a member of the board of governors at St. John's from 1946 to date.

Besides his medical affiliations, Dr. Stewart is active in civic affairs and is a member of the Board of Stewards of Boston Avenue Methodist church. He recently resigned from the Tulsa Rotary club after 13 years' membership because of pressing professional duties. He was director of the Tulsa community fund from 1943 to 1945 and president of the Family and Children's service of Tulsa in 1945.

Adding to the list of offices he has held are president of the Tulsa County Medical Society in 1942 and a member of the board of trustees from 1943 to 1947, and member of the Blue Cross board of directors.

A veteran of World War I, Dr. Stewart is married and has two children. His home is at 2500 East 27th Place, Tulsa.

MEDICAL SERVICE SOCIETY RAISES PLEDGE



At the regular monthly meeting of the Oklahoma City chapter of the Medical Service Society of America the group raised their pledge for the Oklahoma Medical Research Foundation from \$1000 to \$5000. The society is composed of detail men representing pharmaceutical houses.

Two guest speakers were also present for the meeting. W. W. Rucks, Jr., M.D., expressed the appreciation of the medical profession for the work being done by the Medical Service Society to promote the Oklahoma Medical Research Foundation. E. R. "Pete" Weaver, secretary of the Oklahoma Pharmaceutical Association, Stillwater, also spoke to the group.

Members of the M.S.S. reported good reception from the distribution of ad reprints they have made in doctors' offices, hospitals, etc., for display purposes to give more widespread appeal to the recent newspaper advertising.



"The most satisfactory results..."

**IRRITABLE
BOWEL
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"Therapeutic efforts toward the relief of constipation in patients with an irritable bowel syndrome must be continued over prolonged periods of time. Cathartics which exert their action by direct irrigation of the intestinal mucosa have no place in long-term bowel management. . . . The most satisfactory results were obtained with a hydrophilic mucilloid [Metamucil] prepared from psyllium seed. . . ."*

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*Dolkart, R. E.; Dentler, M., and Barrow, L. L.: The Effect of Various Types of Therapy in the Management of the Irritable Bowel Syndrome. *Illinois M. J.* 90:287 (Nov.) 1946.



SEARLE

**RESEARCH
IN THE SERVICE
OF MEDICINE**

DO YOU HEAR IT?

"Tell Me, Doctor" is the title of the five minute nightly radio program broadcast over KOCY (1340 on your dial) at 10:08 p.m. This is the combined work of the Public Policy and Publicity Committee and the Radio Sub-Committee of the State Medical Association.

The initial program went on the air February 16, 1948. The programs are transcriptions on health subjects designed to be of information and interest to the public. The transcriptions were purchased at cost from the Michigan State Medical Society which has, and is, sponsoring the same programs on stations located throughout the state of Michigan. A highly receptive record has been established through these presentations of several months.

Station time for the Oklahoma City program has been purchased by Connie's Prescription Shoppe, 1209 North Walker, Oklahoma City, Oklahoma—C. J. "Connie" Masterson, owner. The overall schedule calls for 312 five minute programs extending over a period of a year. Commercial openings and closing are not transcribed and are screened by both the sponsor and the committee.

This work is somewhat experimental in that it is an initial move into the radio field and a direct implementation of one important section of the recently adopted expansive Public Relations Program of the Association.

The radio phase of the program is designed to use the 29 radio stations in Oklahoma as soon as the committee can make final arrangements. Local sponsors from a selected field are to be obtained to control costs and it is anticipated that some local participation and regional subjects can be incorporated as this activity develops.

Members of the Public Policy and Publicity Committee are: McLain Rogers, M.D., Clinton; C. G. Stuard, M.D., Tulsa; John F. Burton, M.D., Oklahoma City; C. E. Northcutt, M.D., Ponca City; D. H. O'Donoghue, M.D., Oklahoma City; and D. W. Darwin, M.D., Woodward. D. H. O'Donoghue, M.D., is the radio sub-committee chairman and the following represent members of the committee by Councilor Districts: William Lafon, M.D., Alva; P. J. Devanney, M.D., Sayre; Mark Holcomb, M.D., Enid; James Haddock, M.D., Norman; Gerald Downing, M.D., Lawton; W. E. Brown, M.D., Tulsa; E. D. Padberg, M.D., Ada; W. N. Weaver, M.D., Muskogee, and Nesbitt L. Miller, M.D., Oklahoma City.

OKLAHOMA GROUP ATTENDS THREE CHICAGO MEETINGS

Representatives from the Oklahoma State Medical Association and related groups attended three conferences in Chicago in February.

February 6 and 1 Ned Burleson, M.D., Prague, and Dick Graham, executive secretary of the Oklahoma State Medical Association, attended the third annual meeting of the National Conference on Rural Health. Dr. Burleson is chairman of the rural health committee of the Oklahoma State Medical Association. Health problems of the rural child, rural youth and World War II, child psychology, rural public health organization, Olmstead county child health project, rural youth looks at health,

rural school health program and medical service in rural areas were topics under discussion at this conference.

The 21st annual meeting of the National Conference on Medical Service was held February 18 and Oklahoma representatives attending this meeting were Henry Turner, M.D., Oklahoma City, Clinton Gallaher, M.D., Shawnee, Bill Harkey, attorney for the state board of medical examiners, and Dick Graham.

Attending the 54th annual Congress on Medical Education and Licensure February 8, 9 and 10 were Dr. Turner, Harkey, Graham, Mark Everett, M.D., dean, School of Medicine of the University of Oklahoma, and Paul Fesler, administrator, University Hospital, Oklahoma City.

All three meetings were held in the Palmer House at Chicago.

COYNE CAMPBELL OPENS NEW SANITARIUM

Moving into larger quarters for the third time in nine years, Coyne H. Campbell, M.D., opened his new sanitarium at Northeast 23rd and Spencer Road, Oklahoma City, in January.

Thirty beds was the capacity of Dr. Campbell's first sanitarium which he opened in 1939 at 717 North Robinson. In 1941, he moved to Fourth and Walnut where he had a 60-bed sanitarium.

At his new sanitarium, 100 patients can be cared for in the modern, fireproof buildings recently built on a 20-acre tract. No bars are on the windows and detention screens are used on the buildings. A department of occupational therapy has been added and the sanitarium is equipped to care for a limited number of custodial patients. Private, semi-private rooms, and wards are available.

The offices of the Campbell Clinic are also located at the above address and the clinic is open 24 hours. H. G. Sleeper, M.D., is also associated with Dr. Bell and Dr. Campbell.

The sanitarium has an open staff and any qualified psychiatrist who is a member of the state medical association can bring patients there, Dr. Campbell explains.

GRAHAM IS GUEST SPEAKER AT COLORADO CONFERENCE

Explaining "Medical Public Relations and Postgraduate Education in Oklahoma," Dick Graham, executive secretary of the Oklahoma State Medical Association, was guest speaker at the first annual conference of presidents and secretaries of component medical societies of the Colorado State Medical Society. The meeting was held February 14 at the Colorado room of the Shirley-Savoy hotel in Denver.

O.S.M.A. MEMBER TO ROME IN MAY

Howard L. Puckett, M.D., Stillwater, will leave in May to appear before the International College of Surgeons in Rome, Italy. At the Rome meeting he will give an illustrated lecture on his operation for reconstruction of the finger.

Dr. Puckett made a similar trip to Lima, Peru, in March, 1946, where he lectured and showed a moving picture on his surgical operations on bone deformities following injury.

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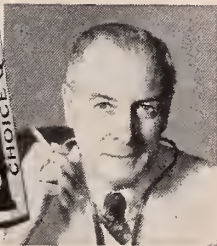
*Experience is the best
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a cigarette, too!*

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According to a Nationwide survey:

***More Doctors Smoke CAMELS
than any other cigarette***

When 113,597 doctors from coast to coast—in every field of medicine—were asked by three independent research organizations to name the cigarette they smoked, more doctors named Camel than any other brand!

25 YEARS AGO

(from Editorial Notes—Personal and General)

Dr. J. S. Allison, Tahlequah, visited the New Orleans Clinics in February and March.

Dr. J. M. Postelle, Oklahoma City, attended the New Orleans Clinics in March doing work in gastro enterology.

Tulsa physicians are anticipating the construction of a building to be used exclusively by physicians, dentists and allied professions. . . . Contract has been let for an eight story building, to be located at 6th and Boulder, which will cost \$400,000.

Dr. Winnie M. Sanger, Oklahoma City, a leader in the Oklahoma State Federation of Women's Clubs, addressed the young women of Weatherford recently. Her subject was "Beauty and Duty."

DO YOU KNOW?

That the Oklahoma State Medical Association office makes mistakes? In the last issue of the Journal in this same column, we inadvertently left out the names of the following Oklahoma physicians who have been certified by the American Board of Surgery:

Patrick Nagel, M.D., Oklahoma City; S. N. Stone, M.D., Oklahoma City; Joe Parker, M.D., Oklahoma City; and Ray H. Lindsey, M.D., Pauls Valley.

A.M.A. DIRECTORY SECOND REQUEST TO BE MAILED SOON

A second request with a duplicate information card will be sent soon to all physicians from whom cards have not been received so that they will have an opportunity to supply the necessary information for their listing in the Director of the American Medical Association.

Physicians are urged to use the card addressed to them as it bears their own serial number assigned to their data. If any physician receives a card addressed to another physician who has moved away, he is requested to return the doctor's card with the new address written on the slip bearing his name and serial number.

Before the card is filled out, physicians are asked to check the list of specialties on the back of the card and select only one specialty, indicating, in the space provided on the front of the card, either that practice is limited to that specialty or that special attention is given to that branch of medicine along with general practice. Fill in the lines marked "intern" and "resident" only if you are now serving an internship or residency in a hospital.

ANNOUNCEMENTS

PEDIATRICS COURSE SLATED AT SCHOOL OF MEDICINE

A three-day postgraduate course in pediatrics will be given at the University of Oklahoma School of Medicine and Children's Hospital, March 22-24.

Dr. Waldo E. Nelson, professor of pediatrics, Temple University and Dr. Myron E. Wegman, professor of pediatrics, Louisiana State University will be guest speakers. Dr. Nelson is editor of the Mitchell-Nelson textbook on pediatrics and he was one of the speakers at the Oklahoma City Clinical Society in 1946.

The tentative program includes: rheumatic fever, problems of the premature infant, tuberculosis of infancy and childhood, parenteral fluid therapy, diarrheal diseases, immunizations, celiac disturbances, infant feeding management of meningitis, acute leukemia in childhood, anemias of infancy and childhood, nephritis and nephrosis, appendicitis in young children, nutritional disturbances, and growth and development.

Members of the department of pediatrics at the medical school will conduct hospital rounds each morning. The course is open to any interested practicing physician and no fee will be charged.

PEDIATRICIANS TO MEET

The areal meeting of the American Academy of Pediatrics will be held at the Olympic hotel, Seattle, Washington, September 13-15, 1948. All members of state medical associations are invited to attend. Registration fee will be \$5.00 for non-members together with a \$5.00 registration for which each registrant receives a ticket to the banquet, making a total registration fee of \$10.00. For further information or registration address: Dr. C. G. Grulee, Secretary-Treasurer, American Academy of Pediatrics, 636 Church Street, Evanston, Ill.

OBS.-GYN. EXAMS SET

The general oral and pathology examinations (Part II) for all candidates will be conducted in Washington, D. C., by the American Board of Obstetrics and Gynecology from Sunday, May 16, through Saturday, May 22, 1948. The Shoreham hotel in Washington will be headquarters and hotel reservations should be made by writing direct to the Shoreham. Information and application blanks should be addressed to Paul Titus, M.D., Secretary, 1015 Highland Building, Pittsburgh 6, Pa.

RADIOLOGICAL SOCIETY SEES X-RAY FILMS

Lucian Pascucci, M.D., presented x-ray films on several cases when the Oklahoma State Radiological Society met in Tulsa recently at the Mayo hotel.

Those present were: Ira Lockwood, M.D., Kansas City; Jim Stevenson, M.D., Tulsa, and E. Palik, M.D., pathologist at St. John's hospital, Tulsa.



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HAVE YOU HEARD?

Recently elected officers of the medical staff of the Ardmore Sanitarium and Hospital are chairman, *Roger Reid, M.D.*; vice-chairman, *F. W. Boadway, M.D.*; secretary, *Ethel M. Walker, M.D.*; consultants in surgery, *J. O. Asher, M.D.*, *A. W. Truman, M.D.*; consultants in obstetrics, *J. Hobson Veazey, M.D.*, *Ethel M. Walker, M.D.*; and consultants in medicine, *Joseph R. Karlick, M.D.* and *J. B. McConnell, M.D.*

George W. Scott, M.D., Tishomingo, has been awarded the bronze star medal for exemplary conduct in ground combat against the armed enemy on or about August 3, 1945, in the Pacific theater of operations.

J. Raymond Hinshaw, M.D., University of Oklahoma School of Medicine graduate of 1946, and Rhodes Scholar now studying at the University of Oxford, Oxford, England, writes that he has been spending the past several weeks in Stockholm, Copenhagen, Uppsala and the Netherlands. Dr. Hinshaw said when he returned to Oxford to enroll for this semester that Professor Le Gros Clark, head of the medical school, had made plans for him to work with him in his department on research problems this year and next year. Writing of Stockholm, Dr. Hinshaw said, "The whole town has much the appearance of a well kept hospital, it is so clean." Dr. Hinshaw is the son of Dr. and Mrs. J. R. Hinshaw, Norman.

C. R. Rountree, M.D., Oklahoma City, has been elected a member of the membership committee of the American Academy of Orthopedic Surgeons. Those elected to the five man board were chosen from various parts of the United States to determine the qualifications necessary for those elected to the academy. Dr. Rountree was named to the committee at a meeting held the last week in January in Chicago.

L. G. Neal, M.D., Ponca City, discussed "Sex Education in Children of Five and Six" at a recent P.T.A. meeting in Ponca City.

F. M. Adams, M.D., Viuita, spoke on "Understanding Our Children" at a joint meeting of Muskogee P.T.A. groups. A question and answer period followed Dr. Adams' speech.

Paul Kernek, M.D., Holdenville, used the "Veterans Medical Aid and Care" plan as the subject of his talk before a recent meeting of the Kiwanis club of that city. Dr. Kernek traced the history of the veterans hospitalization program in the United States prior to World War II to the present time.

Paul T. Powell, M.D., Ponca City, has agreed to assist the Kay county health department on a part-time basis until a regular full-time director is named.

J. F. Curry, M.D., Sapulpa, discussed the urgent need for a resuscitator at the Sapulpa hospital before a meeting of the Sapulpa Business and Professional Women's club.

M. E. Robberson, M.D., Wymewood, was honored on his 68th birthday with a family dinner January 22. Among those attending were Dr. and Mrs. M. E. Robberson, Jr., and children.

Port Johnson, M.D., Muskogee, attended the American Academy of Orthopedic Surgeons meeting in Chicago in January.

E. Stanley Berger, M.D., Lawton, spoke to the Lawton Lions club on infantile paralysis. *Leslie T. Hamm, M.D.*, president of the Comanche county medical society, also discussed polio at the meeting of the group.

H. C. Weber, M.D., Bartlesville, has been elected president of the Bluestem Cattlemen's association for 1948.

O. M. Woodson, M.D., Norman, recently had his car and medicine kit stolen from in front of his home during the night.

E. H. Arrendell, M.D., Ponca City, was elected president of the Men's club of the First Presbyterian church at an organization meeting of the Ponca City group.

Mark D. Holcomb, M.D., Enid, was named president of the Garfield County Tuberculosis association at the 12th annual meeting of the group. Dr. Holcomb gave the main address at the meeting and spoke on the topic "Pneumothorax Treatment of Pulmonary Ambulatory Tuberculosis."

M. L. Whitney, M.D., Okemah, is president of the junior chamber of commerce of Okemah.

OSAGE MEDICAL SOCIETY PRES. MARRIES KANSAS GIRL

Announcement is made of the marriage of Charles S. Stotts, M.D., Pawhuska, and Mrs. Betty Pratt Rogers at the home of the bride's parents at Fredonia, Kansas, January 3, 1948, at noon.

Dr. and Mrs. Stotts left after the reception for a wedding trip to various points in California and are now at home at 301 East 11th St., Pawhuska.

Dr. Stotts is president of the Osage county medical society, chief of staff at the Osage County Infirmary and a member of the staff of the Pawhuska Municipal hospital.



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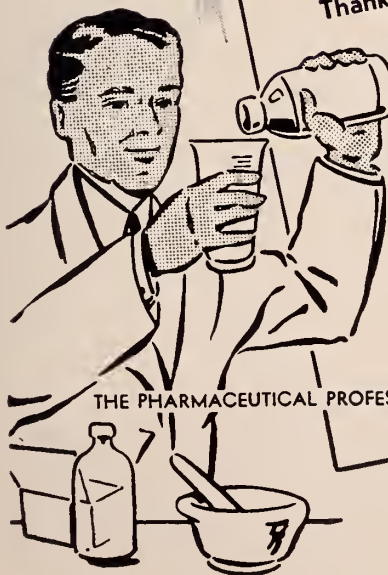
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MEDICAL SOCIETIES AROUND THE STATE

Carter County

A discussion of clinical cases of heart disease and the viewing of a motion picture dealing with cardiac and venal edema constituted the scientific and educational program of the Carter County Medical Society when it met February 10 for a dinner and business meeting in Ardmore.

Roger Reid, M.D., newly elected secretary of the Carter county group reported that the meeting was well attended with 21 members present. J. M. Gordon, M.D., Ardmore, is the county medical society president for 1948. The Carter county society is planning to bring in speakers from outside the area and to make use of medical pictures that are available at future meetings.

Cleveland County

M. M. Appleton, M.D., Oklahoma City urologist, was guest speaker at the January meeting of the Cleveland County Medical Society.

Garfield County

Donald H. Smith, M.D., Fairview, and A. F. Dougan, M.D., Enid, were accepted as members of the Garfield County Medical Society at a January meeting of the group. Turner Bynum, M.D., Oklahoma City, spoke on "Medical Aspects of Gastric Ulcer" and Evans Chambers, M.D., Byron Cordonnier, M.D., C. J. Roberts, M.D. and Paul Champlin, M.D., took part in the related discussions.

Committees were also announced as follows: cancer, Dr. Champlin, Evans E. Talley, M.D., and Leland Shyrock, M.D.; disaster, Raymond Jacobs, M.D., George Ross, M.D., Waldo B. Newell, Jr., M.D., and Mark Holcomb, M.D.; and bulletin, Dr. Roberts, Dr. Holcomb, John McIntyre, M.D., Avery B. Wight, M.D., and Sydney Kaplan, M.D.

Kiowa County

Election of 1948 officers was held at the Kiowa County Medical Society January 21. New officers are R. F. Shriner, M.D., president; Wilson Mahone, M.D., vice-president; and J. B. Tolbert, M.D., secretary-treasurer.

Comanche County

Bryon W. Aycock, M.D., was elected president of the Comanche County Medical Society at the annual election meeting of the group. E. Stanley Berger, M.D., was named secretary-treasurer and William C. Cole, M.D., was elected delegate.

Payne County

Public Relations was Dick Graham's topic when the executive secretary of the O.S.M.A. spoke to the Payne County Medical Society at a meeting January 18. Newly-elected officers presided at the meeting. They are Clifford Bassett, M.D., president; C. W. Moore, secretary; Howard Puckett, vice president.

Alfalfa-Woods Counties

At a joint meeting of the Alfalfa-Woods County Medical Societies John Records, M.D., and J. F. Kuhn, M.D., Oklahoma City, spoke to the group. The meeting was held in Cherokee and 12 physicians and their wives were present.

Stephens County

Fred L. Patterson, Sr., M.D., was elected president of the Stephens County Medical Society at a meeting of the group February 10. Other officers named were W. K. Walker, M.D., vice-president, and W. R. Cheatwood, secretary-treasurer. Dr. Patterson, Wallis S. Ivy, M.D., and E. C. Lindley, M.D., were elected to the board of censors and Everett G. King, M.D., was named delegate to the annual meeting.

ARDMORE PHYSICIAN HAS NEW X-RAY MACHINE

Walter Hardy, M.D., Ardmore, has recently received and had erected the newest General Electric deep therapy x-ray machine for his hospital. Occupying a room in the hospital where it will remain and give its service, another machine just like it but portable, will be used to go from room to room to treat patients that cannot be moved to the x ray departments. In three rooms in one section of the hospital Dr. Hardy has recently invested \$15,000 in equipment.

Telling the story of the advancement in x-ray machines in this excerpt from a clipping from the Daily Ardmoreite: "The fingers and hands of Dr. Walter Hardy bear many severe scars that came from the use long ago of x-ray machines. These marks on the fingers came before men of science learned how to protect the operator of an x-ray machine. Now the operators wear gloves lined with lead, an apron lined with lead and there is a screen in the operating room that is lined with lead and it is placed between the machine and the operator while the x-ray treatments are being given."

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1. Arbesman, C.E., et al., *Jl. of Allergy* 17:275, Sept. 1946
2. Feinberg, S.M., and Friedlaender, S., *Am. Jl. Med. Sci.* 213:58, Jan. 1947.
3. Fuchs, A.M., et al., *Jl. of Allergy* 18:385, Nov. 1947.

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BOOK REVIEWS

OCCUPATIONAL MEDICINE AND INDUSTRIAL HYGIENE. Rutherford T. Johnstone, A.B., M.D. St. Louis: C. V. Mosby Company, 1948. 117 illustrations, seven in color. 604 pages.

The commanding significance of modern industry in the United States with its widespread distribution plus the present transportation facilities, expose every physician, no matter how obscure, to occupational diseases and liability hazards of industry. With these medicolegal problems in mind every physician should possess some general knowledge of occupational disease and industrial hygiene and should have at hand up-to-date works for authentic information on specific cases when occasion arises. The 600-page, well-illustrated, carefully indexed work of Rutherford T. Johnstone just from the press meets this need. Even the physician who has maintained an interest in this field and accumulated a reference library covering its manifold problems will want to add this book to his collection.

On the fly leaf the quotation from Richard DeBury calls attention to the virtues and limitations of books and is, singularly, appropriate in this field. In the preface the reader is invited to participate in the poetry and romance of occupational medicine and to accept the challenge of our limitations. Also, the author here stresses the patient-doctor relationship and calls attention to the fact that although occupational medicine has been looked upon as a specialty "it is by no means a restricted specialty" and that it must take into account man's health and happiness as affected by many factors which may or may not make him susceptible to occupational hazards.

Since it would be impossible to discuss the contents of this important text chapter by chapter, suffice it to say that part one contains seven chapters dealing with the general principles which every physician should know, including the background and future of industrial medicine, the fundamentals of workmen's compensation, the importance of scientific facts in medicolegal controversies and the teaching of industrial medicine.

In part two, 12 chapters are devoted to industrial solvents, the hydrocarbons and other important agents through which life may be endangered and health unfavorably influenced. Under part three we find eight chapters dealing with the metals including a discussion of "metal fume fever" in the last chapter.

Part four is devoted to the very important consideration of the dusts. Of the 12 chapters in this section some are devoted to tuberculosis and pneumonia, the dermatoses, oxygen therapy, the synthetics, special industrial processes, industrial hygiene, and pre-employment examinations and the placement program.

There is an appendix discussing the chemicals in common trade-name products which serves as a handy reference full of interest. The book is enriched by the new experiences and conditions growing out of our rapidly expanding industry augmented by the late war and by the changing pathological concepts, and by many case histories, yet the reader in search of detailed information about some specific problem may be disappointed because of the meager light thrown upon certain aspects of the subject. To cite a special instance, physicians responsible for the health of employes in the great petroleum industry could make good use of a chapter, bringing together all the author's data with amplification concerning the petroleum hydrocarbons and the gas

hazards connected with the production, refining and consumption. Having offered this criticism it is only fair to say that the author has wisely anticipated all possible critics by including in his preface the following paragraph:

"In thumbing through the copy of this book, the original pages having been sent to the publisher, we realize that there have been certain omissions. Critics will wonder why the subjects of nutrition, or aviation medicine, or industrial nursing, to mention a few, have not been discussed. The answer is that these problems warrant textbooks of their own. To offset any remorse in this regard the author is comforted by the fact that he has adequately combined the clinical aspects of the occupational diseases with a description of industrial processes, their appraisal and control. He feels that within these pages will be found not only his personal experience, but also material which the average physician will seek in vain in his textbooks."—Lewis J. Moorman, M.D.

A PRIMER OF CARDIOLOGY. George E. Burch, M.D., F.A.C.P. and Paul Reaser, M.D. 272 pages with 203 illustrations. Philadelphia: Lea and Febiger, 1947.

This treatise on the introduction to cardiology is an excellent presentation. The subject matter is primarily that of physiology. The book is profusely illustrated with conveniently placed figures and diagrams emphasizing graphically the fundamentals of cardiac physiology. Prolonged discussion of controversial data is scrupulously avoided.

The authors discuss briefly and in simple terms present day facts and theories concerning normal and abnormal cardiovascular dynamics. Of particular interest is the section dealing with edema.

This book is designed primarily for medical students; however, there is much information which is of value to practitioners. The graduate student will find it an excellent review of cardiac physiology.—R. C. Pigford, M.D.

ESSENTIALS OF PHARMACOLOGY. Frances K. Oldham, Ph.D., F. E. Kelsey, Ph.D., E. M. K. Geiling, Ph.D., M.D., all of the University of Chicago. 440 pages. Philadelphia: J. B. Lippincott Co., 1947. Price \$5.00.

This small book is intended for use in an introductory course in pharmacology for medical students, dentists, pharmacists or nurses, and should fill that purpose. Since it is short and concise, it would be of more use possibly, to the practitioner as a source of information about the many new drugs which have appeared during the past few years. Space is given to anti-histaminics, nitrogen mustards, methadon, folic acid, anti-thyroid compounds, sulfones, PABA and the new sulfonamides and antibiotics to name only a few. The usual drugs are also discussed and this should serve the practitioner as a general review of pharmacology.

General grouping of the drugs is on a basis of therapeutic use. Drug names are in English, and metric dosages are given. Official pharmacopeial preparations and some new and non-official remedies are listed. Many structural formulas are given. The index is satisfactory. There are many errors in proof reading.—Harold G. Muchmore, M.D.

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OBITUARIES

J. P. Webb, M.D. 1888-1948

J. P. Webb, M.D., died February 3 at the home of his son in Dallas, Texas, after an illness of two years. Formerly of Durant, he was associated with the late O. J. Colwick, M.D., in the Durant clinic and later established the Webb clinic which he operated until ill health forced him to give up his practice.

Dr. Webb was born in Jamestown, Alabama, September 30, 1888. He attended the University of Alabama Medical school and came to Durant from Lone Oak, Texas. He was a member of the Baptist church and Masonic lodge and several medical societies. He is survived by his widow, Mrs. Gipsy Webb, Oklahoma City; three sons, J. P. Webb, Jr., Dallas; Scotty Webb and Jack Webb of Durant; one daughter, Mrs. Margaret Shirley, Durant; and one sister, Mrs. Della Garrett, Jamestown, Alabama.

E. F. Lewis, M.D. 1865-1948

E. F. Lewis, M.D., died January 13 in his sleep at the home of his daughter, Mrs. Mittie Lewis of Ada. Dr. Lewis was in active practice until two years ago.

Born in Pennsylvania in 1865, he would have been 83 in March. He received his medical schooling in Little Rock, Ark., and began practice at Cliff, Oklahoma, then in Indian Territory. He then moved to Oakland and later to Kingston and in 1924 began his practice in Ada. He was a deacon of the First Baptist church of Ada.

Surviving are four daughters, Mrs. Mittie Davis of Ada, Mrs. Myrtle Flint of Kingston, Mrs. Eunice Vaughan of Tahlequah and Miss Pearl Lewis of Chicago; three sons, M. L. Lewis, M.D., Ada, Fred Lewis of Seminole and Royal Lewis of Siloam Springs, Ark. Mrs. Lewis died in June of 1946.

Ralph W. Rucker, M.D. 1911-1948

Ralph W. Rucker, M.D., Bartlesville, died January 27 following a fall on an icy walk near his home. Dr. Rucker fell on the ice after taking his four children to the home of a neighbor when a small fire occurred in the basement of the Rucker home.

Dr. Rucker was born January 19, 1911, in Norman. He attended grade and highschool there and was graduated from the University of Oklahoma and the University Medical school. He was a member of the band and the Kappa Alpha social fraternity while at the University.

Dr. Rucker started practice in Bartlesville in 1939 and continued to practice there until he went into the army. After four years, he was released from the army in 1946 with the rank of major. He served as president of the Washington-Nowata County Medical Society in 1946.

He served his internship at Cook County hospital, Chicago, and his residency at the First Presbyterian hospital, Chicago. He received his degree in eye surgery from Northwestern university in 1939.

He is survived by his widow, two daughters, Louise, nine, and Rosalind, six; two sons, Ralph W., Jr., five, and Clinton Allen, two; his mother, Mrs. W. N. Rucker, Oklahoma City; and two brothers, Truman, Tulsa, and Bob, Oklahoma City.

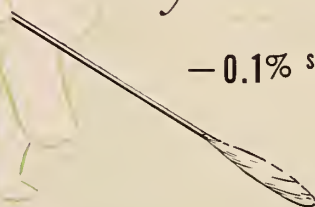
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THE MEDICAL SCHOOL

CALENDAR — MARCH, 1948

SURGICAL PATHOLOGIC CONFERENCES — Each Tuesday 11:00 A.M. to 12:00 Noon.

MEDICAL CONFERENCES — Each Wednesday 9:00 A.M. to 10:00 A.M.

CLINICAL PATHOLOGICAL CONFERENCES — Each Thursday 11:00 A.M. to 12:00 Noon.

TUMOR CLINICS AND CONFERENCES — First and Third Tuesdays (March 2 and 16) 8:00 A.M. to 9:00 A.M.

UROLOGICAL PATHOLOGIC CONFERENCE—Second Tuesday (March 9) 8:00 A.M. to 9:00 A.M.

ORTHOPEDIC PATHOLOGICAL CONFERENCE — Last Tuesday (March 30) 8:00 A.M. to 9:00 A.M.

MONTHLY STAFF MEETING — Second Friday (March 12) Dinner, 6:15 P.M.

RADIOLOGIC CONFERENCE — Fourth Monday (March 22) 6:45 P.M. to 7:30 P.M.

Dr. J. D. Cone, (Med '47), now interning at Ewsley Memorial Hospital in Chicago, has received a fellowship in anatomy at the school of medicine beginning July 1, 1948.

Dr. John DeVore (Med '45), has received a residency in medicine at the University Hospital, Oklahoma City, beginning July 1, 1948. Since his discharge from the army in January, he has been serving a fellowship in the department of anatomy at the medical school.

Dr. John F. Hackler, (Med '33), professor of preventive medicine and public health, attended the health conference of the National Congress of Parents and Teachers in Chicago February 16 and 17. He represented the Oklahoma Congress of Parents and Teachers.

Dr. R. G. Hobgood, (Med '45), has received a residency in urology at University Hospital, Oklahoma City.

Dr. Dick Lowry, (Med '45), has received a residency in eye, ear, nose and throat at the University Hospital, Oklahoma City.

Maj. A. A. Hellams, (Med '38), recently has been assigned chief of the medical service at the Griffiss airforce base, Fort Worth, Texas.

Mr. Kenneth F. Wallace was appointed by the board of regents to the position of business administrator of the University Hospitals. He began his duties March 1, 1948. Mr. Wallace attended the University of Oklahoma specializing in accounting and business law, and took courses in hospital administration at the University of Chicago. For the past nine years he has been administrator of the Chickasha hospital and clinic, and prior to that he was head of the bookkeeping department of the First National Bank at Chickasha. He is president-elect of the Oklahoma State Hospital Association.

Dr. Howard A. Bennett, who was appointed professor of anesthesiology in December, 1947, has begun his duties at the University Hospitals.

SCIENTIFIC EXHIBITS

• • • • Annual Meeting Committee and Council revive pre-war policy of "Scientific Exhibits" at Annual Meeting—desirably located and decorated space available for a maximum of 10 exhibits!

• • • • Physicians and hospitals invited to make space requests now—on a "first come, first served" basis! Write a note to the state office for details desired. Space and decorations without charge. Exhibits must be placed in the Skirvin Tower Hotel, Sunday, May 16, 1948.

Mark the 55th Annual Meeting dates on your calendar! May 17-18-19, 1948. House of Delegates meets May 16—*Advise us now* on your desired *Hotel* accommodations!!

THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

THE ANNUAL MEETING

Once a year the Journal urges all members to attend the Annual Meeting. This year the meeting will convene in Oklahoma City May 17 through 19. There seems to be no reasonable excuse for not planning to attend this meeting. Emergencies cannot be anticipated but no physician in the state can afford to deliberately miss the Annual Meeting of his association.

Since the A.M.A. has seen fit to place special emphasis on general practice by conferring a medal on the outstanding American family doctor of the year and since the need of general practitioners is universally recognized, this year's program will be a continuation of last year's plan whereby there will be only two sections, one on medicine and one on surgery. The afternoons will be devoted to one general session. All this for the purpose of giving all the members a broader understanding of medicine in all fields.

THE NEW DIRECTORY

Before this issue of the Journal appears, the members of the Association will receive the third edition of the Directory. This edition augmenting and bringing up to date previous editions, will contain a roster of all physicians in the state, general and county, as of December 31, 1947.

Under approximately 30 headings much useful information has been assembled. Since the State Board of Medical Examiners anticipates reporting from its own office directly to the members, this department has been omitted.

This publication represents a great deal of work and it would be a great satisfaction to know whether or not it is of genuine service to the membership. Why not drop a line to Mr. Clayton Fondren at 210 Plaza Court.

AN HUNDRED FOLD

Members of the State Medical Association have made an investment, good for mounting dividends throughout the years. The

1948 Public Relations Program is outstanding in conception and scope and it will stand as a challenge to all other states in the union. It has been suggested that members tag each \$20.00 invested in other things during the current year and see how the returns, in satisfaction and material dividends, compare with the \$20.00 invested in public relations.

The officers, council and committees deserve much credit. Give them a hand.

METHODIST BISHOP SCORCES DOCTORS

The above headline appeared above the following remarks (Cleveland, AP, Feb. 19) in a local paper:

"A closed union operated by the medical profession is to blame for a serious shortage of doctors, says Methodist Bishop G. Bramley Oxnam of New York.

"The profession, he declared, controls the number of students entering medical schools and, as a result, the number of physicians in the United States increased only from 120,000 in 1920 to 175,000 20 years later.

"Bishop Oxnam spoke at a session of the annual convention of the National Association of Methodist Hospitals and Homes which opened Wednesday."

It may be fair to say that it is the Christian duty of Rev. Bromley speaking with the authority of a Methodist Bishop to be better informed. On the other hand, the medical profession from the county society level up to the A.M.A. is largely to blame for the bishop's apparent lack of knowledge. He speaks with intelligence but he lacks information which we should have supplied long ago.

Repeatedly in the editorial columns of the Journal it has been pointed out that our medical schools cannot turn out more well-trained graduates until the taxpayers or philanthropists provide more funds for physical facilities and teaching personnel. Modern medical education is very expensive—utterly beyond the power of a "closed medical union" if such a union existed. Full

time teachers are poorly paid and many part time clinical teachers work in unison with much less than labor union pay. This condition has existed throughout the life of our own school. In lieu of certain intellectual, cultural and professional benefits, the part time clinical teachers have been glad to give instruction and care for clinical patients without remuneration. If physicians had means in keeping with their industry and ambitions it is reasonable to believe they would put up the money for more room in the medical school, more beds in the University Hospital, more and better teaching personnel and adequate funds for research.

Obviously the bishop is not intimately acquainted with the spirit of American medicine; he has not penetrated the composite heart of American physicians. If he were more enlightened he could not say a "closed union" is to blame for the shortage of doctors.

In Oklahoma, the problem is in the hands of the taxpayers, the legislators and the board of higher regents. Unobtrusively, without prejudice or criticism our public relations should bring enlightenment, understanding and cooperation. Without an eye for material personal gain the doctors will strive not as a union but in unison to provide more family physicians for Oklahoma.

WE BLUSH

A citizen of Oklahoma City traveled to California during the war for employment. While there he developed an acute respiratory infection. Consulting a doctor, he paid \$7.00 for examination and \$3.00 for three or four shots of penicillin. He returned to Oklahoma City and suffered a similar attack. Consulted a doctor, paid \$15.00 for examination, and when he returned the next day, was told that he had syphilis. After 10 shots of penicillin a Wassermann test was reported negative, he was pronounced cured and presented with a bill for \$465.00.

In both instances the above fees were authenticated by receipts signed by the respective doctors. Naturally curious about the costs, the patient found that the negative Wassermann test came from the State Board of Health but was unable to trace the source of the original report upon which the alleged diagnosis was based. According to the patient when he asked the doctor where the test upon which the original diagnosis was

based was made, the physician refused to answer.

Apparently the patient was overcharged and the taxpaying members of the medical profession helped pay for the authenticated Wassermann test while the attending doctor stuffed the \$465 in his pocket.* What can public relations do about such practices.

Apropos the above story we quote from Percival's Medical Ethics (published 1803):

"But in the consideration of fees, let it ever be remembered, that though mean ones from the affluent are both unjust and degrading, yet the characteristic beneficence of the profession is inconsistent with sordid views and avaricious rapacity. To a young physician it is of great importance to have clear and definite ideas of the ends of his profession; of the means for their attainment, and of the comparative value and dignity of each."

*For the benefit of the membership, it should be known that this particular doctor is not a member of his county society.

ADVANCES IN MILITARY MEDICINE

In this issue of the Journal there is a review of the two volume work under the above title dealing with science in World War II. This important discussion comprising 900 pages dealing briefly with many of the problems, investigations, discoveries, and accomplishments of military medicine will help the average reader to obtain a better appreciation of the magnitude of this subject.

Fortunately, for those seeking information, this account is greatly abbreviated and deals only with World War II. What a voluminous tome the full story would make. Leaving out the unrecorded act of primal sympathy on the part of our savage forbears, for those wounded in tribal warfare, the account could begin with the crude care of the war-wounded recounted by Homer and follow down through the ages. Methods, facilities and practices approaching those of today were developed in Imperial Rome. Marked advances came during the Renaissance. The story would reveal successive steps in the humane care of the war sick and wounded in the seventeenth, eighteenth and nineteenth centuries, beneficently supplemented by the gift of scientific advances and the merciful and efficient development of nursing and Red Cross services, particularly in the nineteenth and twentieth centuries. While war becomes more devastating the sympathy of man for man becomes more

constructive. May not the medical profession, the nursing profession and the Red Cross continue to take just pride in their missions of mercy when the wrath of mars engulfs the world in strife and misery?

MEDICINE AN IMPORTANT PART OF DEMOCRATIC CULTURE

The late librarian, Archibald MacLeish, Library of Congress, said, "We will either educate the people of this Republic to know, and therefore to value and therefore to preserve their own democratic culture, or we will watch the people of this Republic trade their democratic culture . . . for the tyranny which is overrunning eastern, central and southern Europe."

Apropos our sudden awakening as to the medical profession's need of more effective public relations this statement assumes a significant meaning. We are confronted with the threat of socialized medicine chiefly because we have failed in our patient-doctor and doctor-public relations.

This to our great chagrin, especially since the United States represents the only world power whose national origin postdates the printing press. When we became too occupied with the science of medicine to retain public esteem through the art of medicine we should have made up the loss through the press. Let's hope it is not too late.

THE GOAL

It is most unfortunate that the Medical Research Foundation campaign passed from the professional to the lay fund-raising stage with the professional goal unattained. It has been said "we are a compound of both here and hereafter; we shall be made responsible for both while here" . . . "Responsibility walks hand in hand with capacity and power."

If you have not contributed, think it over, measure your capacity and exercise your

power. This may be a last reminder, Cicero said, "Nobody can give you wiser advice than yourself; you will never go astray if you listen to your own suggestions."

THE STRUGGLE FOR FREEDOM

In the British Medical Journal of January 17 we find this significant statement:

"Doctors are not business men. They do not form a class whose money comes to them by heredity. They work hard—probably harder and certainly for longer hours than any other section of the community. They are subject to great strain and risk of ill health. The love of their work makes them put up with much that no other group of workers would tolerate. Next to their work what they most prize is freedom—freedom to practice what they are taught and to carve out a career by hard endeavor. In Britain this freedom is secured by the ownership of general practices and by voluntary service in hospitals. This freedom is now being undermined. What medical men most fear is this loss of freedom. By standing firm they can retain it."

With the National Health Service Act, proposing universal so-called free medical service, staring them in the face, 86 percent of the members of the British Medical Association voted not to accept this service. The outcome of this threat of government controlled universal medical service and this bold opposition on the part of the British Medical Association is of great interest to American physicians. Our freedoms are gradually going. It is time to decide whether the United States government belongs to the people or whether the people belong to the government. The free American physician will slave for his patients but he will not become bondsman to his government which was conceived in the spirit of freedom and founded in the name of personal liberty.

Have you made your reservation for the 55th Annual Meeting of the Oklahoma State Medical Association, May 17-19?

Write NOW to the state office, 210 Plaza Court, Oklahoma City.

SCIENTIFIC ARTICLES

OBSTRUCTION AT THE VESICAL NECK*

C. D. CREEVY, M.D.**

MINNEAPOLIS, MINNESOTA

The vesical neck is a most important part of the male organism. It consists of the internal urinary meatus and sphincter, the prostatic urethra, and the external sphincter and membranous urethra. Leaving aside its important sexual function, it presides over voluntary retention and expulsion of urine. In all probability the sphincters are kept closed in the intervals between micturition by their inherent tone. When the intravesical pressure rises sufficiently, it provokes a simultaneous contraction of the detrusor and trigone, which pulls open the internal sphincter, and urine is forced past the external sphincter by the pressure generated by the contracting detrusor. Thus anything that narrows, occludes, or stiffens the vesical neck will hinder urination.

A number of disorders may do so. Chief among them is benign hypertrophy of the prostate. Being lobulated, flexible, and to some extent mobile, it exerts a valvular effect. Prostatic carcinoma acts by narrowing the lumen of the prostatic urethra and by making it rigid, and fibrosis of the prostate and internal sphincter acts mainly by producing stenosis. Combinations of two or even of all three of these lesions occur.

The net effect of any of them is to reduce the size of the urinary stream and to increase the work of the detrusor muscle, which ultimately becomes fatigued. This is evidenced first by divided or intermitten urination i.e., the stream stops before emptying is complete and is resumed after a variable interval. At first this is most evident on arising in the morning. As the obstruction increases, the detrusor becomes incapable of expelling the last few drops of urine with a vigorous thrust, the normally sharp "end point" is lost, and some terminal dribbling appears. The nocturia which develops

before the occurrence of residual urine is hard to explain.

As fatigue increases, residual urine appears, and both diurnal and nocturnal frequency are aggravated. Acute retention may occur at any time, either from further enlargement of the prostate due to engorgement with blood or to an acute inflammation; or it may result from the loss of expulsive force which follows overstretching the detrusor by prolonged voluntary retention (automobile rides, drinking alcohol).

Parenthetically, the importance of this factor of prolonged voluntary retention in reducing expulsive force was strikingly demonstrated by a group of investigators in New York who catheterized normal young men after they had forced fluids, held the urine as long as possible, and then voided. They had residual urines up to 275 cc.! This points a moral to the surgeon who will not allow his postoperative patients to be catheterized until painful distention of the bladder has occurred.

In the absence of complete retention, the weight of an increasingly large residual urine may produce pressure anesthesia of the vesical wall and lead to periodic involuntary urination (overflow or paradoxical incontinence). Concomitantly, the increased pressure required to force urine from the ureters into the never-empty bladder leads to dilatation which progresses up the ureters to involve the kidneys. When this advances sufficiently, polydipsia, anorexia, loss of weight, and anemia herald the development of the resultant uremia.

While this process is going on, the increased work of the bladder leads to muscular hypertrophy (trabeculation) and the increased intravesical pressure produces cellulitis. Infection or stone formation may ensue at any time after the development of residual urine. Prolonged incomplete retention often leads to atony of the detrusor, which makes complete emptying of the bladder difficult even after removal of the obstruction.

*Presented before the General Session of the Oklahoma State Medical Association at the Annual Meeting, May 14, 1947.

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The cause of benign hypertrophy is unknown. It is predominantly a disease of later years, and has been attributed to arteriosclerosis, to persistent infection, to overindulgence in and abstinence from sexual activities, to prolonged habitual voluntary retention of the urine (engorgement of prostate and atony of bladder), and to the influence of certain hormones. Various observers have blamed a deficiency of male hormone, an excess of estrogen, an excess of prolans produced by a pituitary stimulated by an androgen deficiency, and other factors. While it is possible to produce enlargements of the prostate in various experimental animals by administering androgens, estrogens, or prolans, the lesions do not resemble histologically those which occur spontaneously; attempts to treat benign hypertrophy with endocrine preparations have failed, and the mechanism of its production remains to be determined.

It is well established that benign hypertrophy develops from the mucosal and submucosal glands of the prostatic urethra, which are not part of the true prostate gland. The early lesion is found just beneath the urethral mucosa; it expands and compresses the prostate as it grows and, being surrounded by a fibrous capsule, is readily enucleated, leaving the compressed normal prostate behind.

Prostatic carcinoma is also of obscure origin. It ordinarily develops in the posterior lobe or lamella, which lies below and behind the ejaculatory ducts, and is a part of the true prostate gland. It is unencapsulated and has a capacity for unlimited growth, invasion, and metastasis. As Huggins has shown, it is influenced in the majority of instances by sex hormones,

The fibroses appear to result from long standing prostatitis, but are mimicked by the congenital and acquired hypertrophies of the internal sphincter.

The differential diagnosis depends chiefly upon palpation of the gland, the histories of all three lesions being similar until local extension or metastasis leads to pain in the sacral and sciatic areas in prostatic carcinoma. Benign hypertrophy has the same consistency as the normal gland, while fibrosis is somewhat firmer. Both are smooth, while carcinoma is usually stony hard and nodular, and often fixed. Prostatic calculi that produce induration without the characteristic crepitus can be identified by x-ray of the

pelvis, which will also reveal the metastases to bone which are so common in prostatic carcinoma. In about 80 percent of these cancers which have metastasized to bone, the acid and alkaline phosphatase levels of the serum are elevated.

Cystoscopy is of little assistance in differentiating these three lesions.

It seems desirable to mention at this point the less frequent causes of obstruction at the vesical neck. These include vesical neoplasms which lean over the internal meatus during urination, or invade it. Vesical calculi may produce obstruction if they overlie the internal meatus. Not often recognized until too late by practitioners are obstructive lesions in infants and children. These include congenital valves of the prostatic urethra, and ureterocle. I have recently seen a boy of eight with obstruction due to displacement of the posterior wall of the bladder and vesical neck by distension of a huge vesical diverticulum. All of these are easily identified if the physician will inquire about difficult urination and will measure residual urine in all cases of difficult, frequent urination and of persistent pyuria even in infants and children.

The treatment of obstruction at the vesical neck varies widely with circumstances. The benign lesions are best discussed first. When symptoms are mild and there is little or no residual urine, gentle prostatic massage may be of temporary assistance in reducing the size of the gland by expelling secretion. Cautious urethral dilatation may help if there is an element of fibrosis. All patients being treated medically should be cautioned to avoid overdilatation of the bladder (long rides, ingestion of alcohol).

I have no success with any hormone in the treatment of benign hypertrophy. Estrogens are probably harmless in small doses, although they may occasionally produce a variety of untoward reactions (psychosis, hæmorrhagic diatheses, cutaneous eruptions) in susceptible individuals. Testosterone is objectionable because it may stimulate an occult or latent carcinoma to grow and to metastasize.

The patient with acute retention will often recover his ability to urinate after a single aseptic catheterization with a small soft rubber catheter, well lubricated and gently introduced. This is greatly assisted by the preliminary injection into the urethra of a small amount of a water soluble lubricant. If retention persists, an indwelling catheter (16

or 18 Foley) and urinary antiseptics should be employed for a day or two. If he is then unable to void satisfactorily, operation should be considered.

Occasionally it will be impossible to catheterize a patient whose bladder is distended and whose sphincters are in spasm from repeated efforts to urinate. They may relax and permit catheterization without trauma if spinal or pentothal anesthesia is used. If this is impractical, suprapubic puncture and aspiration with a spinal puncture needle and syringe are simple and very useful. Immediately afterward an inlying catheter is easily inserted, but this should be done before refilling and straining occur.

If catheterization is impossible, if the renal function is seriously impaired, or if the general condition is very poor, suprapubic cystostomy may be advisable. This is most safely performed with a Kreutzmann trocar if there is no local disease of the bladder requiring immediate attention. Once done, it should be maintained until the general state and renal function are at their best before undertaking to relieve the obstruction at the vesical neck.

For the patient with severe obstructive symptoms, a large residual urine, or persistent or recurrent complete retention, operation is required. I am opposed to "prophylactic operations" in patients with very mild symptoms and little or no residual urine, because one cannot predict the future course of the disease.

It goes without saying that an elderly man about to undergo an operation of any kind must be studied carefully, particularly with respect to his cardiovascular apparatus, and to metabolic disorders such as diabetes.

If the patient is febrile, or if his renal function is impaired, he should be prepared for operation by forced fluids, urinary antiseptics, and intermittent catheterization. An inlying catheter is used only if catheterization is difficult or if the renal function is very bad, because it may lead to spasm of the bladder during operation—a great handicap if transurethral resection is to be done.

The choice of operation must be left to the surgeon. My own preference is for transurethral resection in about 95 percent of the cases. Carefully done by a skilled operator, its low risk and short hospital stay demand its employment in many cases. A recent investigation has shown that an important cause of untoward reactions and even death is hemolysis in the circulating

blood by irrigating water which enters the cut prostatic veins; it can be prevented by using an isotonic irrigating fluid (four percent glucose).

Suprapubic prostatectomy is reserved for patients with very large glands, impermeable strictures high in the bulbous urethra, hips too stiff to permit the position necessary for transurethral operations, or with disorders of the bladder requiring open operation (stones too large for litholapaxy, large vesical diverticula or neoplasms). Judicious preparation, the proper use of penicillin and sulfonamides, employment of a transverse incision, packing the prostatic cavity with oxycel gauze, and leading the suprapubic tube out through a separate stab incision will serve to keep the mortality low and the period of hospitalization reasonably short.

The treatment of prostatic carcinoma is a separate subject. For the small lesions without evidence of local extension or metastases, radical perineal prostatectomy is the method of choice because it alone offers any prospect of cure (50 percent—Young).

If local extension or metastases are present with few or no symptoms, one should simply keep the patient under observation because our palliative measures are effective only for relatively short periods, and should be saved for a time of need. If obstructive symptoms are troublesome, transurethral resection is needed. If painful metastases are present, the cooperative, intelligent patient may be treated with stilbestrol or other estrogens, castration being reserved for the patient who cannot be depended upon to take the drug. When stilbestrol loses its effect, as it will in most cases after six to 12 months, castration may be tried, and will *occasionally* yield a good result.

Conversely, when a patient treated initially with castration begins to lose ground, stilbestrol will occasionally give him a reprieve. In general, estrogens and castration are interchangeable, so that if one is, or becomes after a time, ineffective, the other will not work. However, there are enough exceptions to this rule to warrant trying one whenever the other has failed.

When both of these methods have failed, one may sometimes secure satisfactory temporary relief of pain from the use of x-ray therapy or, often at the expense of recurrent urinary retention, after the subarachnoid injection of alcohol or even, in younger patients in good general condition, by means of cordotomy.

SUMMARY AND CONCLUSIONS

Obstruction at the vesical neck is common, and occurs chiefly in elderly men. It is most often due to benign hypertrophy, carcinoma, or fibrosis of the prostate gland.

Treatment varies widely with the local situation and with the condition of the patient, and includes conservative measures, transurethral resection, suprapubic enucleation, and perineal enucleation or total excision.

THROMBOEMBOLISM

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There are few diseases so disheartening to the physician and so dangerous to the patient as postoperative or postpartum thrombosis. Probably the most tragic event of a surgeon's career is to operate on a patient with a good technical result followed by a smooth convalescence only to have the patient suddenly have a severe pain in the chest on the day of dismissal and die within a few moments. Much has been written and said in the past 10 years concerning pulmonary embolism and it has become an established fact that pulmonary infarcts post-operatively have their origin in a thrombus arising in veins of the lower extremity. The importance of thromboses occurring within the veins is shown in a series of autopsy cases reviewed by McCartney. In 25,711 postmortem examinations done at Minnesota University from January 1, 1919, to December 31, 1938, death was due to pulmonary embolism in 687. Pathologists have shown within the last decade that when complete examination of the legs is made, that 50 percent of the cases show thromboses. A distinction has been repeatedly made between thrombophlebitis on the one hand and the so-called phlebothrombosis on the other. The latter term was coined by Ochsner and DeBakey and refers to the same disease that Homans calls "bland thrombosis." This is an exceedingly important difference. In thrombophlebitis there is an inflammation of the wall of the vein so that the intravascular clot tends to adhere to the wall of the vein whereas in phlebothrombosis there is no such fixation hence the danger of embolism.

The etiology of clot production in the two different entities is entirely opposite. Thrombophlebitis is due to trauma to the vascular endothelium from mechanical injury, bacterial invasion or chemical injury. Phlebothrombosis is thought to be caused by a

venous stasis and to a transformation in the cellular and fluid elements of the blood that increases the clotting tendency. The latter contain thrombi which are red in color, are similar to the clots produced when blood drawn from a venapuncture is allowed to flow into a test tube. These clots usually have their source in the veins of the calf muscles as has been repeatedly shown in autopsies. They also originate in the veins on the plantar aspect of the foot but may extend up into the veins of the thigh and into the pelvis.

We have all been familiar with the picture of full blown thrombophlebitis, phlegmasia alba dolens or just plain "milk leg." This edematous state of the leg with inflammatory changes can be thought of as the end result, a thrombotic occlusion of the femoral and iliac veins with almost complete venous obstruction. It carries a hazard of many untoward sequelae but practically no likelihood of embolism. There is a typical pallor of the extremity and the temperature of the skin is decreased which is thought to be due to the vasospasm resulting from a reflex phenomena from the contained venous thrombus. Ochsner feels that the edema is not all due to venous block since veins as large as the vena cava can be ligated with very little edema of the lower extremities. He believes that the edema is due to the ischemia resulting from the arteriolar spasm. In distinct contrast with the uncomfortable state of the patient with thrombophlebitis there is the almost completely asymptomatic state in the patient with phlebothrombosis. The diagnosis must often be made before any symptoms develop at all. It must be made by careful routine examination of the lower extremities of all patients who have had any major surgical procedure. Ochsner routinely palpates the calf muscles and the plantar aspects of the foot and

dorsiflexes the foot forcefully (Homans sign) in all patients who are in bed and who have had tissue injury. He feels that positive Homan's sign and tenderness along the calf veins is sufficient for the diagnosis of phlebothrombosis. It has been repeatedly brought out that the more silent and insidious the deep thrombosis the more likelihood of embolism, and in bilateral disease with one leg swollen and tender and the other seemingly normal, that the chances are that the embolism had its origin in the normal appearing leg. Phlebograms or x-rays in which opaque solutions are injected into the veins of the legs in an attempt to demonstrate thrombi have been recently thought to be unnecessary.

Prophylaxis of venous thrombi and emboli is certainly the most important consideration in management. Early ambulation following surgical procedures is certainly a step in the right direction. Anything that leads toward a pooling of the blood of the veins of the lower extremity should be avoided—hence prolonged bed rest postoperatively, Fowler's position, is to be guarded against. Elevation of the foot of the bed increases the return of the blood and avoids stasis. Exercise of the extremities should be encouraged with the same idea in mind. At first it was thought that ambulation early postoperative would mean a marked decrease in the frequency of thrombosis and embolism, however, Allen has pointed out that while most doctors think of early ambulation meaning that the patient would walk for a while and then lie down for a period, actually, one finds the patient sitting in a chair with the knees, of course, flexed with the weight of the thigh tending to block off the returning venous system and hence increase the stasis.

It is Ochsner's belief that most cases of clotting within the venous system can be prevented if appropriate measures are instituted. He advocates the application of ace bandages from the toes to the groin on all patients over 40 immediately as the patient leaves the operating room. This is to obliterate the superficial veins and increase the flow of blood through the deep veins. Since obesity is a factor in predisposing to venous thrombosis, dieting preoperatively is indicated. Because of the vasoconstrictor effect of smoking it has been recommended that this be discontinued pre-operatively. Ochsner insists that his patients forcefully plantar

flex their feet against resistance many times a day.

The anticoagulants have been used with varying success in the treatment and prophylaxis of thrombi and embolism. Heparin, an expensive drug, delays coagulation. Since it is rapidly eliminated from the body the drug must be frequently introduced. It was given intravenously at first but recently Loewe of Brooklyn has been giving it in a Pitkin's menstuum subcutaneously with the idea of liberating the drug slowly to give a prolonged absorption. Dicoumarol acts on the liver to prevent prothrombin formation. This drug can be taken orally and is quite inexpensive. The dosage of the drug is somewhat hard to control and prothromin times must be run daily lest hemorrhage from an overdose occur. Actually Waugh of Mayo clinic believes that the instances of bleeding from an overdose have been very small. Artificial Vitamin K and blood transfusions should be given if an overdose with hemorrhagic tendency occurs. Homans recommends that anticoagulants be used postoperatively for patients over 50 years of age particularly in serious abdominal or pelvic operations.

In an individual who has a thrombosing tendency Dicoumarol should be used prophylactically postoperatively. Recently Allen has been using Dicoumarol in all patients between the ages of 40 and 65 undergoing major surgery at Massachusetts General Hospital.

Specific treatment varies in the handling of phlebothrombosis and thrombophlebitis. Since thrombophlebitis has an inflammatory character and there is little likelihood of embolism the preferred treatment in most clinics today is lumbar sympathetic block. This decreases the discomfort, lowers the temperature of the extremity and the edema subsides readily. The response is remarkable and the patient is not only relieved of symptoms but is spared the prolonged after effects such as edema and ulceration. A lumbar sympathetic block dilates the arterioles and thus prevents the accumulation of carbon dioxide responsible for dilating the capillaries and the resultant edema.

In the past 10 years there has been much discussion in the literature concerning the surgical prevention of thromboembolism. This was first initiated in this country by John Homans. Surgical interruption of veins above a suspected thrombus and potential embolism strongly and repeatedly have been

carried out in Boston by several men. Arthur Allen at Massachusetts General Hospital from 1937 to 1945 ligated 1468 veins in 816 patients. The indications for ligation were as follows: signs and symptoms of venous thrombosis 47 percent, signs of pulmonary infarction 34 percent, the prophylactic ligation in older persons likely to develop thromboses 18 percent.

The prophylactic ligation had increased to 36 percent in 1945. Beyond the age of 65 Arthur Allen does prophylactic superficial femoral vein ligations. He does this just below the entrance of the profunda vein. He has done 458 such ligations with only one fatal embolism. In a comparable group of 458 such cases in a control series, in which no ligation was done there were 55 cases of thromboembolic disease with 26 fatalities. Allen makes a point of paying particular attention to ligating the hip joint fractures as they are particularly liable, also patients with thigh amputations should have prophylactic ligations.

Because the patient with phlebothrombosis has few or no symptoms the diagnosis must be made by careful routine examination of the lower extremities of all patients who have had tissue damage. The success of ligation of a vein in preventing embolic phenomena depends greatly on early diagnosis and exact localization of the thrombus.

A definite advantage to surgical interruption is the ease with which the upper femoral vein can be reached under local procaine infiltration. A disadvantage is the sudden complete interruption of the venous return in an extremity already the seat of thrombosis. The exact point as to where to ligate is a controversial one. Homans recommends the common femoral vein above where the profunda comes off for fear of short circuiting emboli in case the superficial femoral vein alone is tied. Allen and Ochsner advocate ligating the superficial femoral vein alone and ligating the profunda only if at operation it is found to contain thrombus. All investigators agree on routine bilateral exploration even if only one leg shows symptoms, on the basis that autopsy material so very frequently shows bilateral involvement. All men agree on the efficacy of introducing a smooth glass tube into the vein proximally to suck out any detachable thrombi.

It is Allen's opinion that femoral vein ligation has no place in the treatment of true thrombophlebitis after the seventh day of

the disease unless infarcts have occurred. He feels that by the seventh day adequate fixation of the clot to the vein wall has taken place. Fine of Boston tends to disagree and asks that we not throw out "milk leg" as being innocuous as far as embolism is concerned. He recommends ligating the common femoral when the vein involvement is below the knee and also if an infarct of the lung has occurred even without any signs of phlebitis. It is a well-known fact that if a patient survives one pulmonary infarct his chance of having a second fatal infarct is quite good. Fine also recommends ligating the common iliacs when there is associated swelling of the thigh with pain in the groin with tenderness or pain in the upper femoral area, or if cyanosis is present or the superficial veins of the thigh are prominent. Both Homans and Fine point out that the edema following iliac ligation is not as marked as when the common femoral is ligated.

It has been recommended that in operating on the femoral vein that vertical incisions be made as oblique incisions are apt to sever lymphatic vessels and thus encourage edema. It is important to open the vein and to remove existing thrombi from above as well as below. A carefully used glass tubing suction tip aids in the removal of clots. Free bleeding at both ends is desirable. The superficial femoral vein should be ligated at the highest possible point so that thromboses don't form in a blind segment.

As said before, the age of the patient has an important bearing on the possibilities of thromboses and embolism. Where a high percentage of elderly patients are treated the incidence of thrombi and emboli will be greater. Welch and Faxon state that in 10,000 wounded and sick soldiers treated there were only seven instances of thrombophlebitis.

It is important to remember that the entire field of vein ligation for the prevention of thromboemboli is yet in its infancy and hence complete data regarding exact criteria for when to and when not to ligate are not accurately standardized or completely agreed upon. The results have been encouraging and in as much as the procedure itself has seemed to be relatively innocuous it is well to begin to think of extending these ideas into the smaller hospitals, out and beyond the corridors of the co-called teaching hospitals. This tragedy, which has plagued surgeons for years and has always been tossed aside as the one event in which our

arms have been tied, is finally beginning to unravel itself. With further knowledge and experience with these new concepts certainly great advances and lowered mortality can be anticipated.

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FRESH FRACTURES OF THE CARPAL SCAPHOID*

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One of the few good things that came out of World War II was the opportunity for certain doctors to see and treat large numbers of cases in their own particular field. Fractures of the carpal scaphoid emphasized several important features:

1. In an injured wrist, this fracture is much more common than ordinarily suspected.
2. The diagnosis of "sprain" is rarely tenable, making routine x-rays imperative.
3. Early and continuous immobilization yields a very high percentage of primary bony unions.
4. Immobilization in plaster leaves the hand and fingers relatively free and does not force the patient to absent himself from gainful occupation.

In writing about this fracture, one is reminded of a saying of Andre Gide, "All has already been said; but, as no one has listened, it is always necessary to start over again." Thus, the purpose of this paper is to make the profession at large more scaphoid conscious, and to urge x-ray examination of all so-called minor wrist sprains. In so doing, more of these fractures will be found at their inception, and, when properly immobilized in plaster at this early date, will go on to primary osseous healing in about 100 percent of cases.

Orthopedic authorities are in agreement that the early treatment of fresh fractures

is no problem, but that the old fractures, long unrecognized or improperly diagnosed, are quite a problem. Under such conditions the best methods of treatment leave much to be desired.

War experience has taught us that this fracture is found most frequently in young adult males, men who are engaged in vigorous athletic programs or in strenuous occupations which expose them to frequent traumatic experiences. The same force that fractures the scaphoid in this age group will produce greenstick fractures of both bones of the forearm in children, or a Colles' fracture in the middle-aged adult. The fact that those in this age group tend to minimize their complaints is another point to be remembered when insisting upon a thorough x-ray study of the wrist. Subsidence of symptoms frequently occurs after the first few days, and often misleads the physician. This pitfall can be avoided by a careful examination. Direct pressure over the scaphoid in the anatomical snuff-box is nearly always pain producing, and arouses sufficient suspicion to warrant x-ray examination. If one is convinced by clinical signs that a fracture is present, and the first x-rays are negative, it is imperative to immobilize the wrist for 10 to 20 days and then repeat the x-rays. Many hidden fractures will reveal themselves at the end of this period.

Because young male adults are exposed to so many traumata, they may be confused as to the actual time when the first injury was received, and thus give a misleading history

*Presented before the Oklahoma City Clinical Society October, 1946.

to the physician. Here only the x-ray can give the approximate age of the fracture, and in turn suggest which method of therapy should be used. Since roentgenograms of the carpal scaphoid require close scrutiny for accurate diagnosis, and since photographic reproductions of this bone are difficult to prepare, the author wishes to submit the following diagrammatic drawings to illustrate the salient features of different aged fractures.

trabeculae traversing the fracture line, and disappearance of the fracture line itself are the favorable signs of early bony union. If these signs are not present, further immobilization in the same type of cast is indicated, since this is all that is needed in the way of treatment, and bony union may ultimately be expected. Furthermore, immobilization should be continuous until the x-ray indicates bony union. This type of cast will not produce any stiffening of wrist or



A. A fresh fracture with arrows pointing to the fracture line which is sharp and distinct. Note that the bone density is the same in the carpal scaphoid as it is in the end of the radius.

B. A fracture weeks to a few months old. Cystic areas now appear along the fracture line, and the edges of bone adjacent to the fracture are of less density than either the rest of the bone or of the neighboring radius.

C. A fracture many months old, or frank non-union. The margins of the fracture are widely separated, irregular, and densely sclerotic.

Treatment of the fresh fracture of the carpal scaphoid is reasonably simple. X-ray is made in three planes, A. P., lateral, and oblique, the latter being most important since it will frequently reveal a fracture not clearly visible in the other two views. If no displacement is present, a plaster cast is applied to the forearm and wrist over unpadded stockinette, extending from just below the elbow to the distal palmar crease, including the thumb as far as the distal interphalangeal joint, and holding the wrist in 30 degree dorsiflexion and slight ulnar deviation. When the patient has been instructed in the proper care of his cast, this original plaster will remain in good condition for eight weeks, at which time it should be removed, and a second x-ray examination should be made without moving the wrist. A goodly portion of fresh fractures will be sufficiently consolidated at this time to allow the patient light use of the wrist. Bony

union is indicated by the presence of trabeculae traversing the fracture line, and disappearance of the fracture line itself are the favorable signs of early bony union. If these signs are not present, further immobilization in the same type of cast is indicated, since this is all that is needed in the way of treatment, and bony union may ultimately be expected. Furthermore, immobilization should be continuous until the x-ray indicates bony union. This type of cast will not produce any stiffening of wrist or

Disappearance of pain or any other clinical sign is not dependable in determining when to discontinue support, and only the x-ray can be trusted to tell when union has taken place.

In conclusion, let me repeat the cardinal features in the diagnosis and treatment of this injury.

1. Make an x-ray of all injured wrists in three planes, A. P., lateral and oblique. Study the pictures carefully under good light, using a hand lens, if necessary, to trace the bony trabeculae.
2. Immobilize all fractured scaphoids in a solid plaster cast until x-ray evidence of bony union is present.
3. Complications of this injury are usually due to failure on the part of the physician to carry out number one or number two, or both, in acute wrist injuries.

SIMPLIFIED SAFER CAUDAL ANESTHESIA

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The object of this paper is to report on some changes that have been made in the technique of caudal anesthesia. These changes have brought about a more satisfactory result with greater safety. My first paper on caudal anesthesia was published in the *Journal of the Oklahoma State Medical Association* in April, 1944. Since then we have delivered over 1200 babies successfully with caudal anesthesia. We modified our technique last June and since that time we have conducted over 300 deliveries without any reaction or any difficulty.

Up until last June we were using 1.5 percent metycaine. We had a number of reactions following the introduction of the metycaine into the caudal canal. The patients would faint away, become cold and clammy with sweat and when they came out of their faint would complain of tingling numbness all over their body. This frightened the patient and the operator. We are now using Pontocaine 0.15 percent and since using this preparation have had no difficulty of any kind. We find that the anesthetic is a little slower to take effect but lasts on the average twice as long as the metycaine. The effect is smoother and the anesthetic properties seem to be greater than the metycaine. This pontocaine solution comes already prepared for caudal anesthesia and is put up in rubber capped bottles of 100 cc. each. We inject one-half cc. of ephedrine into each 100 cc. of pontocaine.

We use the catheter method exclusively. As soon as we are sure the patient is in labor we introduce the catheter and then hold off on the introduction of the anesthetic drug until it is actually needed. We have found that if the drug is continued over too long a time some edema develops and the medicine becomes less effective so we usually wait until the pains are severe enough to require some anesthetic before we actually start the pontocaine solution. We often put the catheters in and leave them in for 12 or more hours before we start the solution. The

reason for this is that if the catheter is in place, ready to go, the nurse in charge can start the medicine at any time during the night and it will not be necessary to break into the doctor's sleep.

I will now give in detail the technique that we are using at the present time. The first has to do with the position of the patient on the bed. We do not use the knee chest position. The patient is placed on her abdomen with two pillows underneath the symphysis. This elevates the buttocks. The patient is more comfortable in this position and will be more apt to lie still while we introduce the catheter. The region around the caudal notch is thoroughly cleansed with one to 1000 plain white aqueous zephiran solution. The caudal notch is located carefully and marked with the fingernail on the skin. The next step is the anesthetizing of the skin and subcutaneous tissue so that the needle can be inserted without pain. For this we use 10 cc. of the pontocaine solution with a 23 gauge one inch needle. A bleb is made in the skin then the solution is injected on down into the fat and about five cc. is injected over the caudal ligament. It usually takes about 10 cc. to get complete anesthesia. The next step is the introduction of the needle. For this purpose we use a Becton-Dickson stainless steel needle with stilet (B-D 461 L.N.R.C.). This is a special needle designed for use with a number four caudal catheter. This needle is grasped firmly in the right hand, held at an angle of about 45 degrees to the level of the skin. The needle is pushed through the skin, through the fat on down to the ligament covering the caudal canal. The needle is pushed through the ligament into the open space beneath and then on until it strikes solid bone. When the needle is first introduced the bevel is up and it remains up. The needle is not pushed up into the canal as we previously did because this is not necessary and there is always danger of puncturing the dura.

As soon as the needle is in the canal, the stilet is removed. We use a number four

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catheter specially made for caudal anesthesia. This catheter is sold by the C. R. Bard Company Inc., 79 Madison Avenue, New York City, catalogue number 328. This is a size four French. This catheter comes with a wire stilet. The wire stilet is pulled back through the catheter so that the end of the wire does not extend out of the end of the catheter. These catheters are marked so you can tell when you have reached the end of the needle. The catheter is now threaded through the needle and up into the caudal canal about an inch or an inch and a half past the end of the needle. If the catheter does not slip on out through the end of the needle easily it usually means that it is not in the canal. It is necessary sometimes to move the butt of the needle up or down or side to side in order to get the axis of the needle in line with the axis of the canal. As soon as the catheter is in place the wire stilet is pulled out of the catheter and then the needle is removed, leaving the catheter in the canal. We now dust a little powdered sulfathiazole around where the catheter enters the skin. The skin is carefully dried and the catheter is strapped on by adhesive and brought up around the side over the crest of the ilium to the front of the abdomen and an ordinary sterile pin is used to plug the end of the catheter.

In order to inject the pontocaine solution it is only necessary to take an ordinary 10 cc. syringe with a 23 gauge one inch needle, which will fit the catheter tightly. We usually start with 30 cc. putting in 10, wait a few minutes and another 10, wait a few minutes and another 10. The solution should run in easily, if it doesn't, it probably means that the catheter is not in the canal. It takes about 20 to 30 minutes for the solution to take effect. The first thing the patient will notice is a cramp like pain running down one or both legs. When this happens we are sure that the medicine is in the canal and is taking effect. This cramp like pain lasts only a very few minutes. Usually by the second contraction after the injection of the medicine the patient is no longer sensitive to pain. There is no rule about the time for the next injection. It depends entirely upon the patient's needs. We have found that many times the first injection will last for two or three hours, while others will have to be repeated in 30 or 40 minutes. It depends on the severity and frequency of the pains. The second injection consists of another 30 cc. or

sometimes 40 cc. if necessary. We usually inject 30 cc. just before the patient is placed on the table for delivery regardless of when the previous injection was given if it is not closer than 15 minutes.

As soon as dilatation is completed and the cervix can no longer be felt around the head, and if the head is down low in the vagina the patient is placed on the table for delivery. Any mal position is corrected then forceps are applied to control the delivery of the head. Episiotomy is done and the baby is carefully delivered. These babies will deliver spontaneously if they are allowed to go long enough but no damage is done by careful application of the forceps and it shortens labor, many times, two or three hours and does away with the necessity of further anesthesia. I know this is common practice in most of the large obstetrical clinics today. If it is necessary to do a caesarean section on a patient under caudal anesthesia this can be done by putting in 30 to 40 cc. just before starting the operation. This will last from an hour and a half to two hours and gives ample time to do the section.

The catheter method offers some distinct advantages over the flexible needles which were first recommended. It is not necessary to use a small trial dose of anesthetic and wait and see if you are in the dural canal. The easy passage of the catheter beyond the point of the needle is usually assurance that it is in the caudal canal. There is no danger of the catheter working further up into the canal when the patient moves about in bed. It is much easier to insert the rigid needle into the canal because you can feel your way. The flexible needles are very difficult because they bend and are easily deflected. If the area has been carefully anesthetized there is no pain at all in using the 15 gauge needle. When we have had difficulty getting into the canal we have found that it is usually due to the fact that we are not up high enough. By pulling the needle out and going in again about an inch above the first point of insertion many times we find that the needle will slip into the canal very easily.

We are now using this anesthetic as a routine on all of our normal deliveries and we are having less than two percent failure. Most of the failures are due to the fact that we are unable to locate the canal or because of deformity, we are unable to get the needle into the canal.

ACUTE INFECTIOUS LYMPHOCYTOSIS

Case History Showing Central Nervous System Involvement

WILMER E. PARRISH, M.D.*

OKLAHOMA CITY, OKLAHOMA

Acute infectious lymphocytosis during the last decade has been receiving more interest, not only because it has to be differentiated from infectious mononucleosis, lymphatic leukemia, and at times, poliomyelitis, but because it has been reported to occur in young adults as well as children.¹ The case to be reported seems to fulfill the requirements set forth by Smith^{2,3} to diagnose this condition; namely, that there was a leukocytosis with a reversal of the normal polymorphonuclear lymphocytic ratio (absolute lymphocytosis); the lymphocytes were smaller than normal; the heterophile anti-body test was negative; and the course was benign, with the subsequent return of the blood and physical findings to normal. The main object in reporting this case is because of the signs of central nervous system involvement, occurrence of which appears to be rather infrequent in this condition. Thelander and Shaw⁴ reported two cases in 1941 in connection with what was thought to be infectious mononucleosis, but are now considered to have been infectious lymphocytosis. Duncan⁵ reported a case in 1943, Beloff and Gang⁶ in 1945 reported two cases suggestive of meningitis. The spinal fluid changes reported so far seem to show a slight lymphocytic pleocytosis and increase in the total protein. It is unfortunate, in the case to be presented, that a spinal fluid examination was not done, since at the time the patient was admitted, it was felt that a spinal fluid examination was not indicated.

CASE HISTORY

L.M. The patient was a two and one-half year old white girl who first became ill on the morning of October 5, 1946, and who, up until that time, appeared well and had no complaints. That morning she got up and was seen to stagger around. She fell to the

ground and bumped the back of her head, but not hard enough to cause a contusion or bump on the scalp. She continued to appear to be slightly lethargic, and to stagger around when she tried to walk. She was taken to her family physician, who could find nothing wrong with her except that she was irritable and had an unsteady gait, with a tendency to stagger to the right. Her temperature at this time was 99.8° rectally. As she was not improved, she was seen by him again on October 7, 1946, when she had a temperature of 102° rectally, her gait was still unsteady, and the right knee jerk was absent. At this time a blood count was done, and there was a leukocytosis of 20,000 with 60 percent lymphocytes. She was hospitalized for further observation and started on penicillin and sulfadiazine, which she received for a period of three days. The following day, her temperature was 104° rectally and the white count had risen to 60,000 with 82 percent lymphocytes. From then, until her discharge from the local hospital on October 13, 1946, her fever gradually subsided, but the unsteady gait persisted, and she developed a few "shotty" inguinal lymph nodes. Because her blood picture remained abnormal, as summarized in Chart I, she was referred to University Hospitals, with a tentative diagnosis of acute lymphocytic leukemia.

She was admitted to Children's Hospital on October 16, 1946, for further study. Her past history was non-contributory, other than that she had had pertussis one year previously. Her family history was non-contributory.

Physical examination revealed a well-developed, well-nourished white girl of about the stated age who appeared pale, but not acutely ill. Her stance and gait were unsteady, with a tendency to list slightly to the right. The pupils reacted to light and accommodation, and fundoscopic examination revealed normal eye ground. The tonsils were hypertrophic, and slightly injected, as

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**Appreciation is expressed to R. G. Obermiller, M.D., Woodward, Oklahoma, for blood counts done from October 7, to October 15, 1946.

was the pharynx. The liver edge was down one inch below the right costal margin, the edge being smooth and non-tender. There was no splenomegaly. The anterior cervical and inguinal lymph nodes were small and hard. Neurological examination showed hypoaffective knee jerk on the left and absent on the right. Both ankle jerks were present. The rest of the physical examination was essentially negative.

Laboratory findings on admission revealed the following: Urinalysis was negative. The blood count showed 4,200,000 RBC, 10.5 Gm. hemoglobin, WBC was 11,750 with 53 percent lymphocytes. The lymphocytes appeared to be normal, but smaller than usual. Platelet count was 176,000, and the bleeding and clotting time were normal. The blood Mazzini was negative, and heterophile agglutination was positive through 1:14. X-ray studies showed nothing of any significance.

Course in Hospital:

After admission to this hospital, she continued to show progressive improvement until she was discharged. On October 25, 1946, her gait had become normal, and the reflexes which had been previously absent had returned. The liver edge was barely palpable below the costal margin, and her blood count was returning to normal. She was discharged on November 2, 1946, with instructions to return on December 2, 1946, for a follow-up examination, at which time her blood count was found to be normal, and there

were no abnormal findings on physical examination.

CHART I

The following table summarizes patient's white blood count with the percentage of lymphocytes during her illness.

*DATE	WHITE BLOOD COUNT	PERCENTAGE OF LYMPHOCYTES
10- 7-46	20,000	60
10- 8-46	60,000	82
10- 9-46	30,000	80
10-10-46	30,000	84
10-15-46	16,300	60
10-17-46	11,750	53
10-23-46	19,050	45
10-31-46	10,950	29
12- 2-46	9,550	21

Comment:

A case of acute infectious lymphocytosis is reported to add to those cases already published that have shown central nervous system involvement.

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MEET OUR CONTRIBUTORS

L. Stanley Sell, M.D., F.A.C.S., Oklahoma City, is the author of "Fresh Fractures of the Carpal Scaphoid" in the Journal this month. He is a graduate of Western Reserve University School of Medicine, 1936. Specializing in orthopedic surgery, he is a fellow of the American College of Surgeons, a member of the American Academy of Orthopedic Surgeons and the Osler Society. He has been certified by the Board of Orthopedic Surgery. Previously located in Cleveland, Ohio, he is now chairman of the insurance committee of the Oklahoma County Medical Society.

Richard G. Stoll, M.D., F.A.C.S., Chickasha, paper "Thromboembolism" appears in this issue of the Journal. He is also a graduate of Western Reserve University School of Medicine of Cleveland, Ohio (1939). He is a fellow of the American College of Surgeons and specializes in general surgery. Dr. Stoll has also been certified by the Board of General Surgery and served his residency in surgery at Cleveland City Hospital.

L. C. Northrup, M.D., F.I.C.S., Tulsa, wrote "Simpli-

fied Safer Caudal Anesthesia," which is in the April Journal. A graduate of the University of Nebraska in 1919, he practiced in Kansas City, Mo., and Minneapolis before coming to Tulsa. Dr. Northrup is a Fellow of the International College of Surgeons and limits his specialty to obstetrics and gynecology.

Wilmer E. Parrish, M.D., Oklahoma City, resident in pediatrics at the University Hospital, Oklahoma City, has an article entitled "Acute Infectious Lymphocytosis" in the scientific section of this Journal. Dr. Parrish graduated from the University of Oklahoma in 1943 and was in the army medical corps 26 months before coming to University Hospital. He is a member of Phi Chi medical fraternity.

C. D. Creevy, M.D., Minneapolis, whose article, "Obstruction at the Vesical Neck," appears in this Journal, is a graduate of the University of Minnesota. His specialty is urology and he has been certified by that specialty board. Dr. Creevy is on the board of governors of the Hennepin County Medical Society.

CLINICAL PATHOLOGIC CONFERENCE

The University of Oklahoma School of Medicine

Presented by the Departments of Pathology and Medicine

BELA HALPERT, M.D. AND ROBERT H. BAYLEY, M.D.

OKLAHOMA CITY, OKLAHOMA

DR. HALPERT: The case we are discussing today illustrates the fact that cancer is not always a fatal disease but that a patient may be cured of cancer and live to die from another cause possibly related, but frequently unrelated.

PROTOCOL

Patient: D. S. C., 73-year-old white male, admitted October 13, 1947; died October 13, 1947.

In November, 1941, the patient was seen in the Outpatient Department of this hospital. At that time he was complaining of a "knot" in the right side of his abdomen (two years), "indigestion" (35 years), diarrhea for 11½ months, nocturia for five months, difficulty in controlling bladder and bowels, and weakness, with loss of 35 pounds weight in the past year. He was admitted to the hospital and the mass in the right side proved to be a carcinoma of the cecum. The neoplasm and a portion of bowel were resected and an entero-colic anastomosis performed. Recovery was satisfactory and he was discharged. At that time his blood pressure was 162 90, and there was slight pitting edema of the ankles. No abnormalities of the heart were noted. It is not known whether or not the edema disappeared following operation. The patient was not seen again until October 10, 1947, in the Outpatient Department. Apparently he had recovered from his previous symptoms. He had dyspnea on exertion for three years, with occasional attacks of orthopnea during the past three months; swelling of the feet and legs had been present for four months. There was no history of pain. He said he had a "stroke" in 1944 with paralysis on the left side (extent not stated). In January or February, 1947, he had another "slight stroke" with involvement of the left side. He recovered from these paralyzes, but how long they lasted is not known. A few days before

coming to the clinic he had a spell of transient blindness in the right eye, lasting about four hours. He had been taking two digitalis tablets daily for the past three months.

At this time the patient weighed 169 pounds, blood pressure was 142 80 with pulsus bigeminus. Memory for recent events was a bit hazy. He had difficulty in expressing himself. Orientation was slightly impaired. The left side of the mouth was "drawn up." Hearing and vision were both impaired. Ophthalmoscopic examination revealed "senile retinitis." Lungs were clear. The heart was enlarged very slightly to the left; no murmurs were heard. There was some tenderness in the region of the old R.L.Q. scar. Right inguinal hernia and hydrocele were present. The liver was tender and extended three or four finger-breadths below the right costal margin. There was pitting edema over the right side at the level of the iliac crest, and 4+ pitting edema of the lower extremities. Rectal examination revealed extreme tenderness, but no masses or blood. The prostate was three or four times enlarged and tender. Reflexes were "hypoactive to absent." Blood count was not remarkable. Urine showed 3+ proteinuria, 3-5 red cells and 5-7 white cells per h.p.f.

Report of the radiologist was as follows: "Barium enema: shows absence of the cecum and ascending colon distal to the hepatic flexure, unable to note any evidence of recurrence. Heart: shows heart moderately increased in size with veiling of the lower portion of the right lung field, apparently due to pleural effusion. Hilar vascular markings are accentuated. Impression: cardiac enlargement and right pleural effusion due to pulmonary congestion. Status after resection of the right side of colon."

Diagnosis from electrocardiogram, as follows: "Auricular fibrillation, recurrent ventricular extrasystoles with bigemina. Pri-

mary T wave changes characteristic of digitalis effect. Heart is in the intermediate position. These findings suggest digitalis intoxication."

He was instructed to return shortly to the clinic, but on October 13, 1947, at 1:30 a.m. he was brought into the emergency room in a comatose condition. A short time previously he had experienced sudden loss of movement of the right hand and arm, followed rapidly by coma.

Blood pressure was 210/90, pulse rate (radial) 54 and apex rate 64. Heart tones were distant. Cheyne-Stokes respiration was present. Both eyes deviated to the left. The pupils were not described. There were minimal areas of dullness in both lung bases, but no rales. There was impaired movement of the right arm and leg, and a positive Babinski on the right side.

He was given aminophylline gr. $3\frac{3}{4}$ I.V., digitoxin 0.6 mg. I.V. in the emergency room, and admitted to the hospital where he was given oxygen by nasal catheter. He made no improvement, and died seven hours after admission.

CLINICAL DIAGNOSIS

DR. BAYLEY: Our patient today is 73 years old, and we read with interest the story which relates to a positively diagnosed carcinoma of the colon, presumably cured by surgery. We are more concerned, however, with the patient's second admission to the Outpatient Department at which time he complained of shortness of breath on exertion, stated to be of three years duration, and orthopnea, but only during the past three months. Edema of the legs and ankles is an additional important complaint. The story of a "stroke" in 1944, with paralysis of the left side of the body and another slight "stroke" with involvement of the same side is very likely related to the episode of transient blindness which lasted several hours and which occurred a few days before coming to the clinic. It is pertinent that he was being treated with digitalis. Thus we have indications of trouble in two systems of the body, the central nervous system and the cardiovascular system. We must first try to determine the relationship, if any, between these two disturbances. Let us consider the cardiac condition. This is a 73 year old man with congestive heart failure of recent origin. At this age there are not many etiologic factors to consider. Except for *arteriosclerotic heart disease*, most causes of heart failure manifest themselves at a much

earlier period in life. To consider for the moment that this may be arteriosclerotic heart disease, are there related conditions which might involve the central nervous system? Yes. Thrombotic emboli discharged from the heart may produce areas of softening in the brain and that would be one basis for involvement of the central nervous system secondary to heart disease. Before we pursue this much further, we should point out that it is quite unusual for embolic phenomena to be limited to the brain and that if the lesions in the brain are secondary to emboli we should find evidence of embolic phenomena elsewhere too. There are two types of cardiac disease which might well lead to embolic phenomena in the brain. *Myocardial infarction* might give rise to emboli, since mural thrombi commonly form in the ventricle overlying the infarct and a portion of the mural thrombus can be dislodged to give an embolus. As a rule, embolic phenomena which follow a myocardial infarct occur within the first weeks after the infarction. There is such a thing as painless myocardial infarction so that the absence of any history relating to chest pain, etc., does not necessarily eliminate this possibility. A second possible cardiac basis for emboli would be *auricular fibrillation*. This may arise spontaneously in arteriosclerotic heart disease. Upon its first appearance it may persist but a short time, spontaneously resolving, spontaneously appearing again, etc., until finally the auricular fibrillation becomes persistent.

In the case at hand, we find that at the last admission the patient did have auricular fibrillation. This results in relative stasis of blood and eddy currents which are very apt to produce thrombi within the auricular appendages. Considering embolic phenomena in the brain, one would expect the course to be the left atrium. Cases have been reported in which massive myocardial infarction followed occlusion of a coronary artery by an embolus discharged from an auricular appendage. We are cautioned not to try to convert auricular fibrillation back to a normal rhythm in order that the hazard of embolic phenomena may be avoided. Actually, efforts to convert auricular fibrillation to normal rhythm are almost invariably unsuccessful so that attempts to do this are not too hazardous. It may be that during the early part of this patient's history there were spontaneous episodes of auricular fibrillation and this might explain the sev-

eral recurrences of "strokes" as embolic phenomena; this is not likely, but it is possible. Physical examination during the last admission revealed pertinent data. We find that the liver was considerably enlarged and tender. Could this have been related to his previous neoplasm? The time interval seems a little bit long; chronic passive congestion of the liver would seem more likely. Edema, complaints of dyspnea, etc. help to support the diagnosis of chronic passive congestion. We are rather fortunate in having two x-rays of the chest, one taken early in the course of the patient's illness, and one, more recent, at the time he was complaining of his cardiac trouble. By comparing the two, it enables us to say that moderate generalized cardiac enlargement occurred in the course of the more recent illness.

In most patients with arteriosclerotic heart which results from sclerosis of the coronary arteries, there is only slight to moderate cardiac enlargement. This is in contrast to those patients with long standing hypertensive heart disease or rheumatic disease in which the heart becomes markedly enlarged. The size of this patient's heart is quite in keeping with arteriosclerotic heart disease. ECG's on the last admission add very little except to positively affirm that the patient had auricular fibrillation. This is important because in arteriosclerotic heart disease it is often very difficult to differentiate between multiple extrasystoles and auricular fibrillation. This patient had both.

A blood pressure of 210/90 signifies *systolic* hypertension and this is not of great significance in relation to hypertensive *disease*. This is the type of hypertension frequently observed in patients with marked atherosclerosis. The decreased elasticity of the aorta and major branches largely explains the increased systolic pressure. As we follow this patient's progress, the impaired movement of the right arm and leg which he developed is evidence of another "stroke." It is interesting to note that on this occasion the right side was involved, whereas former involvement was on the left side. I find it impossible to determine, except on the basis of probability, whether this man was suffering from central nervous system involvement which was an immediate consequence of *arteriosclerosis of cerebral arteries*, or whether *embolic phenomena* of the brain occurred as a direct secondary effect of cardiac disease (auricular fibrillation with release of thrombotic emboli from the left

auricle). We are quite sure that this patient had some cerebral arteriosclerosis, but the question remains whether the primary vascular disease was sufficient to cause the signs and symptoms described.

CLINICAL DISCUSSION

DR. HALPERT: If this patient had had embolic phenomena involving other organs such as the spleen, would that influence your decision as to the primary etiology in relation to central nervous system symptoms?

DR. BAYLEY: Since infarcts of the spleen are usually the consequence of embolic phenomena, this would suggest that emboli had been derived from the heart and would thus materially strengthen the possibility that the cerebral lesions were embolic in nature.

QUESTION: If the central nervous system involvement was on the basis of emboli would not one expect embolic phenomena at many sites?

DR. BAYLEY: It is true that under these conditions emboli would be expected to go to other portions of the body, but clinical manifestations are most striking in relation to lesions of the heart or the brain. This man might well have had splenic infarcts, and other embolic phenomena too — and they might have been clinically silent.

QUESTION: Do you believe that arteriosclerosis itself, without superimposed thrombosis, or without embolic phenomena, might be sufficient to produce hemiplegia, or focal paralysis.

DR. BAYLEY: This is a very difficult question to answer. As a rule, changes of the degree which this patient manifested are explained on the basis of occlusive lesions of arteries. However, transient phenomena, not quite as severe, may be explained simply on the reduction of blood flow to an area without complete obstruction of the vessel. We know that this latter condition occurs in the heart and sometimes angina pectoris can be explained on this basis.

QUESTION: Might the increased blood pressure described late in the patient's course be explained on the basis of increased intracranial pressure?

DR. BAYLEY: If this terminal period of coma was the result of intracranial hemorrhage, a compensatory increase in blood pressure would be expected as one of the manifestations of increased intracranial pressure.

ANATOMIC DIAGNOSIS

DR. HALPERT: I believe Dr. Bayley came as close to accurately stating the anatomic

diagnosis as could be expected on the basis of the clinical findings provided him. At necropsy, evidence of congestive failure included pitting edema which involved the lower extremities and scrotum, ascites to the extent of 250 cc. of straw colored fluid, bilateral hydrothorax (900 and 1200 cc.) and hydropericardium (120 cc.). The liver extended 5 cm. below the costal margin in the right midclavicular line, but it was not enlarged. It extended below the costal margin because the diaphragm was depressed below its usual level as a result of the marked hydrothorax. The abdominal viscera gave evidence of the old resection of colon as described in the protocol. There was no evidence of residual neoplasm so that this man was truly cured by his operation. The spleen was not enlarged, but contained a fairly recent organizing infarct. The heart was moderately enlarged, weighing 525 gms. The apex was rounded and the musculature of the left ventricle was thickened to an average of 1.8 cm. except at the apex. At the apex of the left ventricle, the wall was thinned to 0.4 cm. and composed largely of what appeared to be fibrous tissue. The endocardial surface overlying this presented a thin layer of organizing mural thrombus. There was rather marked atherosclerosis of the coronary arteries, particularly the anterior descending branch of the left. Serial cross sections of this artery revealed a point of obstruction in the distal part which corresponded to the area of infarction described. Kidneys were of essentially normal size, but the surfaces were coarsely granular, the picture of arterionephrosclerosis. Cut surfaces of the kidneys revealed arteriosclerosis of small arteries. Miscellaneous findings included a moderately enlarged prostate and evidence of chronic cholecystitis in the nature of increased thickness of the wall and a large concretion within the gall bladder.

Examination of the brain revealed a large focal area of atrophy 3 x 1.6 cm. in the left cerebellar hemisphere, presumably the sequel of vascular occlusion. The other cerebellar hemisphere and both cerebral hemispheres were not remarkable. A section through the pons disclosed a small area of recent hemorrhage in the brachium conjunctivum. There was marked atherosclerosis of the arteries of the base of the brain, especially the left internal carotid artery. I will have to say that the sequence of events which transpired here is not absolutely clear. We did not find

hemorrhagic lesions in the central nervous system of such a nature as to explain the neurologic manifestations which have been described. I am of the opinion that the primary changes in the brain and heart were both vascular and that only the lesion (infarct) of the spleen might have been the result of embolization.

Our final anatomic diagnosis was as follows:

- Atherosclerosis, generalized
- Arterionephrosclerosis
- Cardiac hypertrophy
- Old healed myocardial infarct, apical, left ventricle
- Old healed infarct, left cerebellum
- Recent infarct, spleen
- Recent hemorrhage, pons — within the right brachium conjunctivum
- Chronic passive congestion of viscera with ascites, hydrothorax bilateral, hydropericardium and edema of lower extremities
- Pneumonia, right lower lobe, with fibrinous and recent fibrous pleural adhesions
- Multiple erosions of gastric mucosa
- Old scar of operation: removal of cecum and proximal portion of ascending colon (1941) for carcinoma of cecum, columnar cell.

GENERAL DISCUSSION

DR. BAYLEY: There is little more to add about the etiology of these lesions, but I might comment for a moment on the treatment of arteriosclerotic disease. This is very difficult to accomplish in aging patients. Iodides have been frequently recommended, are rather effective placebos, but accomplish little real benefit. There was a serious aspect to the cardiac side of this patient's picture since, in spite of a well controlled ventricular rate, he continued to present signs of congestive failure. This is in contrast to that group with auricular fibrillation which can be readily brought under control by reducing the ventricular rate. This latter group of patients may be controlled effectively for a long time and give relatively little trouble. Rapid ventricular rate, rather than myocardial change, is the most important factor in precipitating heart failure.

Annual Meeting program includes a complete schedule of events for the Women's Auxiliary of the Oklahoma State Medical Association.

President's Page

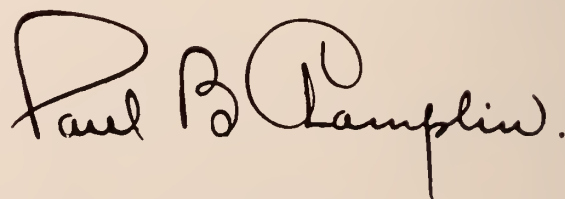
May 16, 17, 18 and 19, Oklahoma City, should be marked on every member's calendar. These are the dates of the Annual Meeting of the Association and each member should make an effort to be present.

Teddy Roosevelt once said, "Every person should give some of his time to the betterment of the profession to which he belongs" — I believe these words to be self evident.

The Annual Meeting produces for each of us an opportunity to enjoy scientific knowledge gained from the experience of others, a chance for fellowship within our profession. If we know each other and our mutual problems, everyone profits.

Few realize the extent to which our Association now plays a part in shaping the destiny of health work in Oklahoma and unless the individual physician keeps abreast of scientific medicine, the job is not complete.

I urge each of you to attend the Annual Meeting, bring your wife and even your entire family — remember the old adage — all work and no play makes Jack a dull boy.

A handwritten signature in cursive script that reads "Paul B. Champlin." The signature is written in dark ink and is positioned above the title "President."

President.

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GENERAL NEWS

A.M.A. SAYS PUBLIC DEMAND FOR NIGHT SERVICE MUST BE MET

The American Medical Association calls on county medical societies to meet the public demand for emergency medical service at night.

"From many sections of the United States" says an editorial in a recent (March 6) issue of the Journal of The American Medical Association, "complaints have come lately that persons who have called physicians late at night have been unable to secure attendance from either those whom they considered their family physicians or from specialists or, indeed, from any physician."

The American Medical Association says that large county medical societies or urban groups should maintain a physicians' telephone exchange which would take the responsibility for locating physicians if response is not made to the ringing of the telephone in the home or in the office.

The solution is simple and practical, requiring only a minimum of community organization. A number of county medical societies already maintain a physicians' telephone exchange where doctors' calls may be received and doctors located if their office or home telephones do not respond. Such an exchange can be utilized at night or on holidays, simply by furnishing the exchange with a list of physicians who are able to make night calls. Such physicians would probably include the younger general practitioners, newcomers to the community, and others in general practice. If such a roster were available, and its availability widely publicized, night calls for medical service would soon gravitate to this center and the patient would be assured the services of a physician.

Under such a system the necessity for calling many doctors would be eliminated. Two calls at most would be necessary. Where there is no physicians' telephone service, it might be possible to have the hospitals co-operate by handling such night calls.

The Medical Society of the District of Columbia and the Milwaukee County Medical Society have found such a plan practical, as have a number of other societies.

By this simple and practical expedient, which is doubtless in effect in modified form in a number of communities, the sick can be served and the medical profession can redeem its pledge of unselfish public service.

It is highly important that where such arrangements exist they be brought to the attention of the lay people in the community through appropriate public channels, not once but repeatedly, to keep the shifting populations well informed.

Few problems in the field of medical service have aroused so much public discussion. Whether resentment against physicians is justified or not, it does harm. The solution for this problem is so eminently simple and would reflect so favorably upon physician-patient relationships that medical societies everywhere are urged to give it serious consideration immediately.

TELEVISION PROGRAMS TO BE FEATURED AT A.M.A. JUNE SESSION

An elaborate television broadcast, demonstrating a varied program which will include medicine, surgery,

gynecology, obstetrics, dermatology, neurology and urology, will be held during the annual American Medical Association session Chicago June 21-25.

Anything of a medical nature to which visual methods can be applied will be demonstrated and operations and clinical material will be included in the program.

PUBLIC HEALTH SERVICE HAS NEW SURGEON GENERAL

Leonard A. Scheele, M.D., has succeeded Dr. Parran as surgeon general of the public health service.

Dr. Scheele received his A.B. degree from the University of Michigan in 1931; his B.S. in medicine in 1933 and his M.D. in 1934, both from Wayne University, Detroit, Michigan. He was commissioned in the U. S. public health service in 1934 and his first assignment was as assistant quarantine officer at the port of San Francisco. He was transferred to the same position in the port of Honolulu during 1935-1936, then was made health officer at Queen Anne's county, Maryland, in 1936-1937. From 1937 to 1939 he was a special fellow at Memorial Hospital, New York.

He was officer in charge of the National Cancer Control Program of the National Cancer Institute from 1939 to 1942. From 1943 to 1945 he was assigned to the army in a variety of major assignments in war areas. He served in military government and allied commission medical operation in Sicily, Italy, and later was in charge of the preventive medicine section of the G-5 division of supreme headquarters of the Allied Expeditionary Force in northwest Europe. During 1946-1947, Dr. Scheele was assistant chief of the national cancer institute of the public health service's national institute of health. In July of 1947 he became assistant surgeon general of the service and director of the cancer institute.

GYN COURSE SUCCESS; NEW CIRCUIT TO OPEN

The postgraduate course in Gynecology during the past year has been a distinct success. J. R. Bromwell Branch, M.D., the instructor, is an excellent teacher and has a most pleasing personality which makes his lecture period an investment very much worth while.

The seventh circuit will open in Southwestern Oklahoma the week of May 10. The teaching centers will be Anadarko, Elk City, Altus, Mangum and Hobart.

Lectures will be given weekly in each teaching center for a period of 10 weeks. However, the lectures will be postponed during the week of May 17, in order that all physicians may attend the Annual Meeting of the Oklahoma State Medical Association, May 17, 18 and 19. All classes will be resumed the week of May 24, in the respective centers.

In spite of the severe winter and icy highways the percentage of attendance has been 88 percent.

Many physicians have driven great distances to hear Dr. Branch. As an example, five physicians from Wichita Falls, Texas, drove 120 miles through a severe snow storm to attend the lecture in Lawton.

Physicians in the seventh circuit who have not enrolled should mail their enrollments to the Postgraduate Committee, 210 Plaza Court, Oklahoma City, immediately.

MILESTONES IN CARDIORESPIRATORY HISTORY



Aretaeus

OF CAPPADOCIA (1st Century A.D.)

*First accurate description of asthma;
separated asthma from orthopnea.*

*"If heart be affected,
the patient cannot long survive."*



SEARLE

RESEARCH
IN THE SERVICE
OF MEDICINE

In the treatment of bronchial asthma, the clinical usefulness of Searle Aminophyllin is well established. Its value in patients who do not respond to epinephrine or in those in whom epinephrine is contraindicated has been stressed repeatedly.

SEARLE AMINOPHYLLIN*

—is accepted therapy also in congestive heart failure . . . paroxysmal dyspnea . . . Cheyne-Stokes respiration.

G. D. SEARLE & CO., CHICAGO 80, ILLINOIS

*Searle Aminophyllin contains at least 80% of anhydrous theophylline.

NEXT IN IMPORTANCE TO DIGITALIS

*for congestive
heart failure...*



Salyrgan-Theophylline

Mersalyl and Theophylline

potent mercurial diuretic

In many cases of congestive heart failure, mercurial diuretics are next in importance to digitalis in maintaining the patient's comfort and prolonging life. Following an injection of Salyrgan-Theophylline in patients with marked edema the urinary output frequently amounts to three or four liters in twenty-four hours. Ampuls of 1 cc. and 2 cc. for intramuscular or intravenous administration. Also tablets (bottles of 25, 100 and 500), for oral use as an adjunct to decrease the frequency of injections and when parenteral therapy is impracticable.

Winthrop-Stearns INC.
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PROGRAM

FIFTY-FIFTH ANNUAL SESSION

OKLAHOMA STATE MEDICAL ASSOCIATION

OKLAHOMA CITY — MAY 17, 18 AND 19, 1948

GREETINGS FROM THE OKLAHOMA COUNTY MEDICAL SOCIETY

The Oklahoma County Medical Society considers it a privilege to be the host at the 55th Annual Meeting of the Oklahoma State Medical Association. The program is excellent and a large attendance is expected.

You are invited to attend a buffet dinner at 6:30 P.M. on Sunday night, May 16th, in the Continental Room, Skirvin Hotel, as the guests of the Oklahoma County Medical Society.

We sincerely hope that as many as possible will attend the meeting for it should be both instructive and enjoyable.

Yours very truly,

W. W. RUCKS, JR., President

Oklahoma County Medical Society

ANNUAL MEETING COMMITTEES - 1948

Annual Session Committee: Paul B. Champlin, M.D., Enid; C. E. Northcutt, M.D., Ponca City; L. J. Moorman, M.D., Oklahoma City.

Scientific Work Committee: Maurice J. Searle, M.D., Tulsa, Chairman; J. H. Robinson, M.D., Oklahoma City; W. W. Sanger, M.D., Oklahoma City; Homer A. Ruprecht, M.D., Tulsa; J. M. Parrish, M.D., Oklahoma City.

Publicity Committee: Joe Parker, M.D., Oklahoma City; Samuel T. Moore, M.D., Oklahoma City; R. P. Messenger, M.D., Oklahoma City.

Social and Entertainment Committee: Herman Fagin, M.D., Oklahoma City, Chairman; A. M. Young, III, M.D., Oklahoma City; Rheba Huff Edwards, M.D., Oklahoma City; J. T. McInnis, M.D., Oklahoma City; P. K. Graening, M.D., Oklahoma City.

Commercial Exhibits Committee: Donovan Tool, M.D., Oklahoma City; Charles H. Wilson, M.D., Oklahoma City; Paul D. Macrory, M.D., Bethany; Edward Farris, M.D., Oklahoma City.

Registration Committee: W. C. McClure, M.D., Oklahoma City; Warren Poole, M.D., Oklahoma City; Louis S. Frank, M.D., Oklahoma City; R. D. Anspaugh, M.D., Oklahoma City.

Reservations and Hotel Committee: Thomas C. Points, M.D., Oklahoma City; James J. Gable, M.D., Oklahoma City; Lewis C. Taylor, M.D., Oklahoma City; Charles A. Royer, M.D., Oklahoma City; Jack Van Doren Hough, M.D., Oklahoma City.

GENERAL INFORMATION

HEADQUARTERS

Skirvin — Skirvin Tower Hotels
Oklahoma City, Oklahoma

ROOM RESERVATIONS

Adequate housing facilities at the leading hotels have been arranged. However, it will not be possible to house everyone in the Skirvin and Skirvin Tower Hotels. It is suggested that all those planning on attending the Annual Meeting make their hotel reservations through the hotel of their choice at the earliest possible date.

In making your reservations, please be certain that you advise the date of your arrival, the approximate time you expect to register into the Hotel, and the date you will leave. Room reservations are canceled at 7:00 P.M. unless a later arrival time is specified.

REGISTRATION

Convention Hall — Basement — Skirvin Tower

Registration will be at the entrance of Convention Hall in the Basement of the Skirvin Tower Hotel. All physicians except those from outside the state, visiting guests, and those on military assignment, *must present membership cards for 1948* before registering. Dues for 1948 will not be accepted at the Registration Desk except from County Secretaries.

Registration will be from 10:00 A.M. to 4:00 P.M. on Sunday, May 16, and from 8:00 A.M. until 6:00 P.M. on Monday, May 17; Tuesday, May 18; and Wednesday, May 19.

SECTION MEETINGS

All Section Meetings will be held on Monday, Tuesday and Wednesday, May 17, 18 and 19, beginning at 9:00 A.M. The Section on Medicine will meet in Parlor B in the Convention Hall. The Section on Surgery will meet in Parlor A in the Convention Hall.

GENERAL SESSIONS

The General Sessions will be held at 2:00 P.M. on Monday, May 17; Tuesday, May 18, and Wednesday, May 19, in Parlor A in the Convention Hall.

SYMPOSIUM

On Tuesday evening at 8:00 P.M. in the Crystal Room, Skirvin Hotel, there will be a Symposium on "What's New in Medicine" in which guest speakers from all specialties will participate.

TECHNICAL EXHIBITS

The technical exhibits will be in the Convention Hall, Basement of the Skirvin Tower Hotel.

SCIENTIFIC EXHIBITS

Scientific Exhibits will be displayed in the Convention Hall, Basement of the Skirvin Tower Hotel. Anyone wishing space for a scientific exhibit, please contact the Executive Office, 210 Plaza Court, as soon as possible.

GOLF TOURNAMENT

A Golf Tournament will be held at 1:00 P.M., Monday, May 17, at the Oklahoma City Golf and Country Club. Details will be available at Registration Desk.

SKEET SHOOT

A Skeet Shoot will be held at 1:00 P.M. on Monday, May 17, at the Oklahoma City Golf and Country Club. Details will be available at the Registration Desk.

HOUSE OF DELEGATES

The House of Delegates will meet on Sunday, May 16, the day preceding the opening of the Scientific Program, Crystal Room, Skirvin Hotel, in order that the business may be completed in time for the Delegates to be able to enjoy the Scientific Program. The first meeting will be held at 2:00 P.M. and the second at 8:30 P.M.

COUNCIL

The Council will convene upon call by the President.

OFFICERS OF OKLAHOMA STATE MEDICAL ASSOCIATION



C. E. Northcutt, M.D., Ponca City
President-Elect



Paul B. Champlin, M.D., Enid
President



Lewis J. Moorman, M.D., Okla. City
Secretary-Treasurer



George H. Garrison, M.D., Okla. City
Speaker of the House of Delegates

YOUR CONVENTION AT A GLANCE

SUNDAY, MAY 16, 1948

- 10:00 A.M.—Council Meeting
- 2:00 P.M.—House of Delegates, Crystal Room, Skirvin Hotel
- 2:00 P.M.—Academy of General Practitioners, Wilson Room, Skirvin Hotel
- 6:30 P.M.—Buffet Dinner, Oklahoma County Medical Society, Continental Room, Skirvin Hotel
- 6:30 P.M.—Class of 1938 Dinner Dance, Venetian Room, Skirvin Hotel
- 8:00 P.M.—House of Delegates, Crystal Room, Skirvin Hotel

MONDAY, MAY 17, 1948

- 8:00 A.M.—Breakfast Past Presidents
- 9:00 A.M.—House of Delegates (if third meeting is necessary)
- 9:00 A.M.—Scientific Program, Convention Hall, Skirvin Tower Hotel
- 12:30 P.M.—Roundtable Luncheon, Crystal Room, Skirvin Hotel
- 1:00 P.M.—Golf Tournament, Oklahoma City Golf and Country Club
- 1:00 P.M.—Skeet Shoot, Oklahoma City Golf and Country Club
- 2:00 P.M.—General Scientific Session, Convention Hall, Skirvin Tower Hotel
- 6:00 P.M.—O. U. Alumni Fellowship Hour, Continental Room, Skirvin Hotel
- 7:00 P.M.—O. U. Alumni Banquet, Venetian Room, Skirvin Hotel

TUESDAY, MAY 18, 1948

- 9:00 A.M.—Scientific Program, Convention Hall, Skirvin Tower Hotel
- 12:30 P.M.—Roundtable Luncheon, Crystal Room, Skirvin Hotel
- 2:00 P.M.—Scientific General Session, Convention Hall, Skirvin Tower Hotel
- 6:30 P.M.—Dinner Honoring Guest Speakers and Sponsors, Wilson Room, Skirvin Hotel
- 8:00 P.M.—Scientific Symposium, Crystal Room, Skirvin Hotel

WEDNESDAY, MAY 19, 1948

- 9:00 A.M.—Scientific Program, Convention Hall, Skirvin Tower Hotel
- 12:30 P.M.—Roundtable Luncheon, Crystal Room, Skirvin Hotel
- 2:00 P.M.—Meeting of Officers of County Societies
- 2:00 P.M.—General Scientific Session, Convention Hall, Skirvin Tower Hotel
- 7:00 P.M.—President's Inaugural Dinner Dance, Silver Glade Room, Skirvin Tower Hotel

MONDAY EVENING

MAY 17, 1948

THE ALUMNI ASSOCIATION OF THE UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE

- 6:00 P.M.—Fellowship Hour, Continental Room, 14th Floor, Skirvin Hotel
- 7:00 P.M.—Banquet, Venetian Room, 14th Floor, Skirvin Hotel

Class Reunions

Class of 1918—Ray M. Balyeat, M.D., Oklahoma City

Class of 1928—Joel S. Price, M.D., Oklahoma City

Class of 1938—Robert Sturm, M.D., Oklahoma City

Honoring D. W. Griffin, M.D., Norman, Professor Emeritus of Psychiatry and Neurology—Moorman Prosser, M.D., Oklahoma City

President's Address

"Achievements of the Oklahoma Medical Research Foundation"

Fred Woodson, M.D., Tulsa

"The Future Plans and Needs of the Oklahoma School of Medicine"

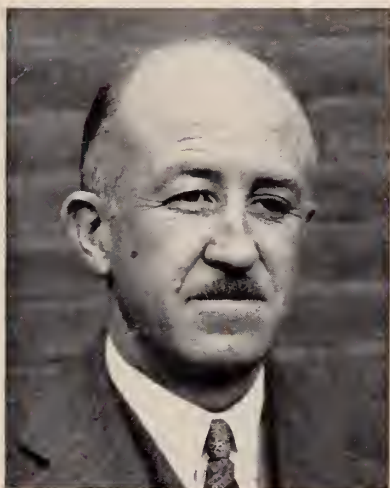
Dean Mark R. Everett, Ph.D.,

Report of Nomination Committee

Election of Officers

GUEST SPEAKERS

LAMMAN GRAY, M.D., Louisville, Kentucky. **Obstetrics and Gynecology.** Assistant Professor Obstetrics and Gynecology, Louisville University.



VINCENT VERMOOTEN, M.D., Dallas, Texas. **Urology.** Professor of Urology, Southwestern University School of Medicine.

FRANKLIN H. TOP, M.D., Detroit, Michigan. **Public Health.** Director Herman Kiefer Hospital; Clinical Professor of Preventive Medicine, Wayne University; Extramural Lecturer in Epidemiology, School of Public Health, University of Michigan.



GUEST SPEAKERS

RICHARD B. CATTELL, M.D., Boston, Mass. **Surgery.** General Surgery Lahey Clinic, Boston. Surgery New England Baptist Hospital; Surgeon-in-Chief, New England Deaconess Hospital.



JACK R. EWALT, M.D., Galveston, Texas. **Neuro-Psychiatry.** Professor of Neuro-Psychiatry University of Texas, Galveston. Director Psychopathic Hospital, University of Texas. Civilian Consultant to Brooke Army Medical Center.

A. W. McALESTER, III, M.D., Kansas City, Mo. **Ophthalmology.**



GUEST SPEAKERS

L. HENRY GARLAND, M.D., San Francisco, Calif. **Radiology.** President Radiological Society of North America. Secretary California State Medical Association. Associate Clinical Professor of Medicine and Radiology at Stamford. Radiology St. Joseph Hospital. Consultant Lederman General Hospital.



HELEN TAUSSIG, M.D., Baltimore, Md. **General Medicine.** Johns Hopkins Hospital. Outstanding specialist congenital heart disease.

ARILD HANSEN, M.D., Galveston, Texas. **Pediatrics.** Chairman Department of Pediatrics, University of Texas School of Medicine. Director of Child Health Program, University of Texas.



WOMEN'S AUXILIARY OKLAHOMA STATE MEDICAL ASSOCIATION

STATE AUXILIARY OFFICERS

President

Mrs. Warren T. Mayfield
Norman

President-Elect

Mrs. Neil Woodward
Oklahoma City

Vice-President

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Mrs. Ollie McBride
Ada



Mrs. Warren T. Mayfield, President
Norman

CONVENTION PROGRAM

Sunday, May 16, 1948

4:00 P.M.- 6:00 P.M.—Registration, Mezzanine, Skirvin
Hotel

Monday, May 17

10:00 A.M.- 3:00 P.M.—Registration, Mezzanine, Skirvin
Hotel

3:00 P.M.- 5:00 P.M.—Tea; Governor and Mrs. Roy J.
Turner, Governor's Mansion

5:00 P.M.- 7:00 P.M.—Registration, Mezzanine, Skirvin
Hotel

6:30 P.M. Executive Board Meeting, Home of
Mrs. Ray Balyeat

Tuesday, May 18

9:30 A.M.-10:30 A.M.—Registration, Mezzanine, Skirvin
Hotel

9:45 A.M. Business Meeting, Continental
Room, Skirvin Hotel, 14th Floor
Report of County Presidents
Report of American Medical As-
sociation Convention, Mrs. Ollie
McBride

Report on Southern Medical Asso-
ciation Convention, Mrs. Ray Bal-
yeat

12:15 P.M. Luncheon and Style Show, Vene-
tian Room, 14th Floor, Skirvin
Hotel

"Love, Friendliness and Good Fel-
lowship," Mrs. Olin S. Cofer,
President, Southern Medical As-
sociation Auxiliary



Mrs. Olin S. Cofer, President
Atlanta, Georgia
Southern Medical Assoc. Auxiliary

SCIENTIFIC PROGRAM

MONDAY, MAY 17

SURGERY SECTION

PARLOR A — CONVENTION HALL — SKIRVIN TOWER HOTEL

Chairman: Lee K. Emenhiser, M.D., Oklahoma City

- 9:00—
9:30—"Treatment of Superficial Foreign Bodies of the Cornea"—Joseph H. Goldberger, M.D., El Reno
9:45—"Hyperglycemia in Eye, Ear, Nose and Throat Conditions"—E. H. Coachman, M.D., Muskogee (with lantern slide illustrations)
10:00—"Indications for Various Ophthalmic Operations"—A. W. McAlester, III, M.D., Kansas City, Mo.
10:30—General Discussion
10:45—"Diagnosis and Treatment of Benign Breast Tumors"—S. N. Stone, M.D., Oklahoma City
11:00—"Fractures of the Upper End of the Femur"—C. R. Rountree, M.D., Oklahoma City
11:15—"Recent Trends in Thyroid Surgery"—F. M. Lingenfelter, M.D., Oklahoma City
11:30—"Common Duct Obstruction"—Richard B. Cattell, M.D., Boston, Mass.

MEDICINE SECTION

PARLOR B — CONVENTION HALL — SKIRVIN TOWER HOTEL

Chairman: T. R. Turner, M.D., Tulsa

- 9:00—
9:30—"Therapy with Children"—Harold Binder, M.D., Oklahoma City
9:45—"Oklahoma's Program for Mental Health"—Charles F. Obermann, M.D., Oklahoma City
10:00—"Pain from a Psychiatrist's Point of View"—Jack R. Ewalt, M.D., Galveston, Texas
10:30—General Discussion
10:45—"Mental Hygiene in the College Health Program"—James O. Hood, M.D., Norman
11:00—"A Problem of Cerebral Palsy"—Robert A. Knight, M.D., Oklahoma City
11:15—"Food Infections and Intoxications"—Franklin H. Top, M.D., Detroit, Mich.
11:45—General Discussion

ROUNDTABLE

CRYSTAL ROOM, SKIRVIN HOTEL

- 12:30—A. W. McAlester, III, M.D.; Richard B. Cattell, M.D.; Jack R. Ewalt, M.D., Franklin Top, M.D.

GENERAL SESSION

PARLOR A — CONVENTION HALL — SKIRVIN TOWER HOTEL

- 2:00—"The Acute Joint"—William K. Ishmael, M.D., Oklahoma City
2:20—"Malformations Amenable to Surgery: Diagnosis and Indications for Operations: Patients Showing Persistent Cyanosis"—Helen B. Taussig, M.D., Baltimore, Md.
2:50—"Treatment of Influenzal Meningitis"—J. B. Snow, M.D., Oklahoma City
3:10—"Rheumatic Fever As a Diagnostic Problem"—Arild E. Hansen, M.D., Galveston, Texas
3:40—Harry Wilkins, M.D., Oklahoma City
4:00—"The General Practitioner's Responsibility in Psychiatry"—Jack R. Ewalt, M.D., Galveston, Texas
4:30—"A Report on Oklahoma's Prepaid Medical Plans"—Mr. Cleveland Rogers, Tulsa

TUESDAY, MAY 18

SURGERY SECTION

PARLOR A — CONVENTION HALL — SKIRVIN TOWER HOTEL

Chairman: Henry G. Bennett, M.D., Oklahoma City

- 9:00—
9:30—"Vaginal Hysterectomy"—F. D. Sinclair, M.D., Tulsa
9:45—"Ectopic Pregnancy"—I. F. Stephenson, M.D., Alva
10:00—"Burns in Children"—Pat Nagle, M.D., Oklahoma City
10:15—"Surgical Treatment of Multiple Polyposis"—Paul Vickers, M.D., Oklahoma City
10:30—"Suprapubic Prostatectomy"—Shade Neely, M.D., Muskogee and Eugene M. Henry, M.D., Muskogee
10:45—"An Evaluation of Prostatic Resection"—Henry S. Browne, M.D., Tulsa and Jack O. Akin, M.D., Tulsa
11:00—"Abdominal Calcifications"—Herman Sehested, M.D., Tulsa
11:15—"Indications for Myelography in Ruptured Intervertebral Discs"—Lucian Pascucci, M.D.
11:30—"Treatment of Meniere's Syndrome"—Clinton Gallaher, M.D., Shawnee
11:45—"Repairing the Saddle Nose"—O. Alton Watson, M.D., Oklahoma City

MEDICINE SECTION

PARLOR B — CONVENTION HALL — SKIRVIN TOWER HOTEL

Chairman: William K. Ishmael, M.D., Oklahoma City

- 9:00—
9:30—"Hypertension: Its Various Aspects and Treatment"—Felix R. Park, M.D., Tulsa
9:45—"The Sympathetic Nervous System and Its Relation to Medical Problems"—Averell Stowell, M.D., Tulsa
10:00—"Bacteriology of Acute Gastroenteritis"—E. R. Marzec, Ph.D., Tulsa (By invitation) and Emil Palik, M.D., Tulsa
10:15—"Malformations Amenable to Surgery: Diagnosis and Indication for Operation; Patients Showing No Cyanosis"—Helen B. Taussig, M.D., Baltimore, Md.
10:45—"Diagnosis by Use of Electroencephalograph"—Charles Smith, M.D., Oklahoma City
11:00—"Anoxia of the New Born and the Resulting Sequela"—Charles Ed White, M.D., Muskogee
11:15—"Tracheotomy As a Routine Procedure in the Treatment of Tetanus"—C. W. Freeman, M.D., Oklahoma City
11:30—"Management of Infantile Diarrhea"—Arild E. Hansen, M.D., Galveston, Texas

ROUNDTABLE LUNCHEON

CRYSTAL ROOM, SKIRVIN HOTEL

- 12:30—Helen B. Taussig, M.D.; Arild E. Hansen, M.D.

GENERAL SESSION

PARLOR A — CONVENTION HALL — SKIRVIN TOWER HOTEL

Chairman: C. E. Northcutt, M.D., Ponca City

- 2:00—"Ten Years Progress in Ophthalmology"—C. G. Stuard, M.D., Tulsa
2:20—"Management of Eye Diseases Commonly Seen in Children"—A. W. McAlester, III, M.D., Kansas City, Mo.
2:50—"Cervical Dystocia"—Thomas C. Points, M.D., Oklahoma City
3:10—"Hormone Therapy with Particular Reference to Menopause and Metrorrhagia"—Laman Gray, M.D., Louisville, Ky.
3:40—"Infections of the Hand"—Ray Lindsay, M.D., Pauls Valley
4:00—"Surgical Management of Carcinoma of the Rectum"—Richard B. Cattell, M.D., Boston, Mass.
4:30—"Malpractice Insurance"—Mr. Roger Bainbridge, Oklahoma City

TUESDAY, MAY 18

SYMPOSIUM**CRYSTAL ROOM, SKIRVIN HOTEL**

Moderator: Onis Hazel, M.D., Oklahoma City

8:00 P.M.—“What's New in Medicine”

Panel: A. W. McAlester, III, M.D.; Richard B. Cattell, M.D.; Jack R. Ewalt, M.D.; Franklin H. Top, M.D.; Helen B. Taussig, M.D.; Arild E. Hansen, M.D.; Laman Gray, M.D.; Vincent Vermooten, M.D.; L. H. Garland, M.D.

GUEST SPEAKERS AND SPONSORS*Speaker*

Arild Hansen, M.D., Galveston, Texas
 L. H. Garland, M.D., San Francisco, Calif.
 Helen B. Taussig, M.D., Baltimore, Md.
 Richard B. Cattell, M.D., Boston, Mass.
 Franklin H. Top, M.D., Detroit, Mich.
 A. W. McAlester, III, M.D., Kansas City, Mo.
 Jack R. Ewalt, M.D., Galveston, Texas
 Vincent Vermooten, M.D., Dallas, Texas
 Laman Gray, M.D., Louisville, Ky.

Sponsor

C. M. Bielstein, M.D., Oklahoma City
 Peter E. Russo, M.D., Oklahoma City
 Luvern Hays, M.D., Tulsa
 LeRoy Long, M.D., Oklahoma City
 Harold Buchner, M.D., Oklahoma City
 Charles A. Royer, M.D., Oklahoma City
 G. W. Winkelman, M.D., Norman
 James G. Phillips, M.D., Oklahoma City
 Henry G. Bennett, M.D., Oklahoma City

WEDNESDAY, MAY 19

SCIENTIFIC PROGRAM

WEDNESDAY, MAY 19

SURGERY SECTION**PARLOR A — CONVENTION HALL — SKIRVIN TOWER HOTEL**

Chairman: Don W. Branham, M.D., Oklahoma City

9:00—

9:15—“Results from Use of Male Sex Hormones in Female Genito-Urinary Malignancy”—
 Leland F. Shryock, M.D., Enid

9:30—“Pulmonary Sarcoidosis vs. Tuberculosis”—L. H. Garland, M.D., San Francisco, Cal.

10:00—“Renal Tumors”—K. F. Swanson, M.D., Tulsa and Charles Hulse, M.D., Tulsa

10:15—“Pari-Thyroid Tumors and Their Relation to Renal Calculi”—Edward N. Farris,
 M.D., Oklahoma City

10:30—“Principles Underlying the Management of Renal Calculi”—Vincent Vermooten,
 M.D., Dallas, Texas

11:00—“Geriatric Gynecology”—Gerald Rogers, M.D., Oklahoma City

11:15—“Induction of Labor”—Jack W. Baxter, M.D., Shawnee

11:30—“Use of Progestin and Vitamin E in Control of Threatened Abortions As Regulated
 by Basal Temperature”—Rex Graham, M.D., Miami

11:45—“The Surgical Treatment of Endometriosis”—Laman Gray, M.D., Louisville, Ky.

WEDNESDAY, MAY 19

MEDICINE SECTION

PARLOR B — CONVENTION HALL — SKIRVIN TOWER HOTEL

Chairman: J. B. Snow, M.D., Oklahoma City

- 9:00—
9:30—"Nutritional Problems"—Lucile Spire Blachly, M.D., Oklahoma City
9:45—"Symptomatology and Treatment of Spontaneous Subarachnoid Hemorrhage"—Robert C. Lawson, M.D., Oklahoma City
10:00—"Ring Worm of the Scalp; Treatment by X-Ray Epilation"—M. O. Nelson, M.D., Tulsa
10:15—"Warts and Their Treatment"—Carl Brundage, M.D., Oklahoma City
10:45—"A Diagnosis and Care of Pyloric Stenosis by the Pediatrician"—George K. Stephens, M.D., Ada
11:00—"Rheumatic Fever"—R. M. Wadsworth, M.D., Tulsa
11:15—"The Relationship of the Private Practitioner to the Health Department"—William A Loy, M.D., Pawhuska and Glen McDonald, M.D., Pawhuska
11:30—"Tularemia in Oklahoma"—Ralph H. Heeren, M.D., Oklahoma City
11:45—General Discussion

ROUNDTABLE LUNCHEON

CRYSTAL ROOM, SKIRVIN HOTEL

- 12:30 P.M.—L. H. Garland, M.D.; Vincent Vermooten, M.D.; Laman Gray, M.D.

GENERAL SESSION

PARLOR A — CONVENTION HALL — SKIRVIN TOWER HOTEL

Chairman: Shade Neely, M.D., Muskogee

- 2:00—"Public Health in Oklahoma"—Grady F. Mathews, M.D., Oklahoma City
2:20—"Epidemiology and Treatment of Poliomyelitis"—Franklin H. Top, M.D., Detroit, Mich.
2:50—"Diseases of the Scrota Contents"—Don W. Branham, M.D., Oklahoma City
3:10—"Injuries of the Urethra, Their Diagnosis and Care"—Vincent Vermooten, M.D., Dallas, Texas
3:40—"X-Ray Diagnosis of Gastrointestinal Disturbances of the Infant"—Peter E. Russo, M.D., Oklahoma City
4:00—"The Present Status of Radiation Therapy in Cancer"—L. H. Garland, M.D., San Francisco, Cal.
4:30—"The Political Scene"—Mr. Dick Graham, Oklahoma City

PRESIDENT'S INAUGURAL DINNER DANCE

Silver Glade Room, Skirvin Tower Hotel

Alan R. Mortiz, M.D.

Department of Legal Medicine

Boston, Mass.

"Medicine's Contribution to Crime Detection"

TECHNICAL EXHIBITS

The following companies will exhibit at the 55th Annual Meeting. Plans have been made for well arranged, helpful booths. Make it a point to visit the technical exhibits to see what the companies are offering the profession

<i>Booth No.</i>	<i>Firm</i>	<i>Location</i>
1	Producers Creamery Company	Springfield, Mo.
2	The Smith-Dorsey Company	Lincoln, Neb.
3	Holland-Rantos Company	New York City, N. Y.
4	Mead Johnson and Company	Evansville, Ind.
5	Roach Drug Company	Oklahoma City, Okla.
6	Coca-Cola Company	Altanta, Georgia
7	Caviness-Melton Company	Oklahoma City, Okla.
8	Connie's Prescription Shop	Oklahoma City, Okla.
9	The Ediphone Company	Oklahoma City, Okla.
10	Eli Lilly and Company	Indianapolis, Ind.
11	J. A. Majors Company	New Orleans, La.
12	Warren-Teed Products Company	Columbus, Ohio
13	Dictaphone Corporation	Oklahoma City, Okla.
14	A. S. Aloe Company	St. Louis, Mo.
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17	C. V. Mosby Company	St. Louis, Mo.
18	Schering Corporation	Bloomfield, N. J.
19	Lederle Laboratories	New York City, N. Y.
20	United Medical Equipment Company	Kansas City, Mo.
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27	Midwest X-Ray and Supply Co.	Tulsa, Okla.
28	Cameron Surgical Specialty Co.	Chicago, Ill.
29	Barclay-Curtis Company "Soundscriber"	Oklahoma City, Okla.
30	General Electric X-Ray Company	Oklahoma City, Okla.
31	Ciba Pharmaceutical Company	Summit, N. J.
32	U. S. Vitamin Corporation	Chicago, Ill.
33	W. C. Scott Company	Kansas City, Mo.
34	Merkel X-Ray and Midcontinent Surgical Supply Company	Tulsa, Okla.
35	H. G. Fischer and Company	Chicago, Ill.
36	Audiphone Company	Oklahoma City, Okla.
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COUNCILOR REPORTS

Annual Report of Councilor, District No. 1

To the House of Delegates,

Oklahoma State Medical Association:

In accordance with the By-Laws of the State Association, I, as Councilor of the District No. 1, herewith submit my Annual Report:

Councilor District 1, extending over Cimarron, Texas, Beaver, Harper, Woods, Alfalfa, Ellis, Woodward and Dewey Counties, represents the entire northwest section of the State. Our geographical location together with an unusual series of extreme winter weather has interfered with my attending some County Society meetings and has completely curtailed other scheduled meetings.

I have been successful in obtaining the appointment of district members to the various sub-committees of the Association's Public Relations Program and they are anxious to promote this important activity in the northwestern section of the State.

One of our outstanding Woods-Alfalfa County Society meetings was held in February with an instructive scientific program presented by two Oklahoma City physicians. Much public interest is being manifest in the Medical Research Foundation and the prepaid plans for hospital and medical service are expanding rapidly in this area. The insurance programs are getting an unusual acceptance beyond previous expectations.

Respectfully submitted,
D. B. Ensor, M.D.,
Councilor, District No. 1

Annual Report of Councilor, District No. 2

To the House of Delegates,

Oklahoma State Medical Association:

As Councilor for the Second District, in accordance with the By-Laws of the State Medical Association, I herewith submit my Annual Report:

As you know, District 2 is composed of nine counties in the extreme southwest part of the state. The greatest number of members of the Association are at the north and south extremes of the District and I have done little visiting of counties other than Washita for that reason. I have attended all Washita County Medical Society meetings. Either Dr. O. C. Standifer of Elk City, Vice-Councilor, or myself have attended all but one of the Council meetings at Oklahoma City.

I have made necessary recommendations to the office of the Executive Secretary for representatives over the district to participate in the Public Relations Program.

Probably the best attended and most favorably accepted event held in our district was the cancer symposium held at Clinton. I feel sure that our district is in favor of repeat symposia on this or other subjects. I believe that it was better liked than weekly two hour meetings held over a period of five or six weeks. There has been a good increase in the enrollment in Blue Cross and O.P.S. in at least part of the District during the past year.

It is anticipated that there will be requests from at least two county societies for consolidation because of small memberships.

Several members of the Second District have been accepted to membership in the American Academy of General Practice.

Respectfully submitted,
L. G. Livingston, M.D.
Councilor, District No. 2

Annual Report of Councilor, District No. 3

To the House of Delegates,

Oklahoma State Medical Association:

In accordance with the By-Laws of the Oklahoma State Medical Association, I respectfully submit herewith the Annual Report of the activities of the Third Councilor District for the fiscal year 1947-48.

Councilor District No. 3 extends over the counties of Payne, Pawnee, Noble, Garfield, Major, Grant and Kay. To cooperate fully with the Public Policy and Publicity Committee of the Association and the new Public Relations program, I have obtained the appointment of sub-committee members representing the profession in District No. 3. The work of the committee members is yet to be fully implemented and this important program will require the time and effort of the individual physician of the district. It is anticipated that we can have both Society and District meetings in the near future to discuss the operations of this far reaching program.

Unfortunately, I have been prevented from visiting each County Society in the past year but I have been privileged to visit with some groups and it is my desire to contact more Societies in the future.

It has indeed been a pleasure and a distinct honor to represent the profession of District No. 3 for the past year.

Respectfully submitted,
Bruce Hinson, M.D.
Councilor, District No. 3

Annual Report of Councilor, District No. 4

To the House of Delegates,

Oklahoma State Medical Association:

Activity within the counties of Oklahoma, Cleveland, Canadian, Blaine, Kingfisher and Logan which comprise the Fourth Councilor District, have not been sensational in nature over the past year but have represented important normal functioning. There have been several meetings of the Executive Committee of the Council and regular Council meetings which were well attended. Many important considerations were made at these meetings that primarily concern all members of the Association rather than particular Councilor Districts.

The County Societies which I have visited during the year have had nice attendance and well-arranged programs. My apologies are extended to those Societies not visited.

This Councilor, representing some 600 members of the Association, feels his responsibilities very keenly. Never before have we been confronted with so many important problems of concern to our organization that necessarily require the most careful consideration and deliberate action. I believe that I have been able to at least partially discharge my duty to organized medicine in that I have fortunately been able to attend nearly all meetings and share in the serious consideration preceding the important decisions made.

Unfortunately, my contact with the individual physician within my District has not satisfied my ambition. I realize that individual discussion is essential but the opportunity has not been possible in most instances. It is my sincere desire to bring more of this into my future representation.

One of the most magnanimous and important activity fields before us at this time is the Public Relations program recently adopted by the Council and yet to be fully implemented. This is the most ambitious and out-

standing program undertaken by Oklahoma physicians and will necessarily call for the expenditure of both personal effort and money. The success of this program will relate directly to the degree of individual participation and support by the profession.

Respectfully submitted,
Carroll Pounders, M.D.
Councilor, District No. 4

Annual Report of Councilor, District No. 5

To the House of Delegates,
Oklahoma State Medical Association:

Councilor District No. 5 comprises Caddo, Grady, Comanche, Stephens, Cotton, Jefferson, Carter and Love Counties. It has been a distinct pleasure to work with the Council and to represent the physicians of the above named eight counties. It does require effort, but I would be glad to do more if it were possible. I have attended all Council meetings and have attended several County Society meetings over the past year.

I have made several trips in the interest of the Medical Research Foundation to help organize the doctors, dentists and druggists. Without exception, all who have contributed time and money to this research opportunity are enthusiastic about its necessary success and the professional men will be in a position to promote the public's interest and support.

I want to thank Dr. Veazey of Ardmore, my Vice-Councilor, for his willing help and support.

Respectfully submitted,
J. L. Patterson, M.D.
Councilor, District No. 5

Annual Report of Councilor, District No. 6

To the House of Delegates,
Oklahoma State Medical Association:

During the past months, although it has not been possible for me to attend all of the meetings of the different County Societies, I have been kept informed of their activities. All of the Societies have been meeting regularly and it is reported by most of them that their attendance has been good. Some of the Societies report a nice increase in the percentage of attendance as compared to last year.

The Executive Committee of the Sixth District which was selected in the previous year has not been changed and has continued to function. A copy of the minutes was mailed to each one of the members of the Committee thereby keeping them informed of the work of the Council.

At the present time, considerable work is being done by a large group in aiding the Public Relations Committee. Various members have been selected to serve on the sub-committees whose function is to help to carry out the programs as outlined. This program is deemed very important by the majority of members and they are more than anxious to have a part in seeing that it is carried out successfully.

It has been a pleasure to have assisted in furthering the organization of the Oklahoma Blue Cross Plan for Hospital Care and the Oklahoma Physicians Service for Surgical and Obstetrical Care and we are proud of the fact that we are of the County in this District leading in the percentage of the population enrolled. Every effort has been made to point out to the public the advantages of this type of health insurance. A review of the reports from N. D. Helland, Executive Director, shows that the plan is rapidly gaining in popularity by all those who are privileged to participate. The osteopaths are somewhat envious of this organization and have been striving to be accepted and permitted to

participate although they have not been given any encouragement. However, it is probable that some time in the future, we may have to admit them on a limited basis rather than create a situation which would be of no benefit to anyone concerned.

The Members of the Sixth District as well as the entire membership of the State Association were saddened by the death of Dr. Ralph W. Rucker of Bartlesville who died some weeks ago. Dr. Rucker was unanimously elected Vice-Councilor at the last Annual Meeting which was held in Tulsa in May, 1947. Although he had only been in office for a few months, he had taken a very active part in the activities of the medical profession in this district and we were looking forward not only to a very pleasant association, but to some outstanding contributions to the organization in this district. I considered Dr. Rucker an outstanding man in his specialty and I am sure that those with whom he worked especially in Washington County will suffer the loss of his inspiring leadership.

Respectfully submitted,
Ralph A. McGill, M.D.
Councilor, District No. 6

Annual Report of Councilor, District No. 7

To the House of Delegates,
Oklahoma State Medical Association:

In accordance with custom of long standing the Councilor of the Seventh District submits a report for the fiscal year 1947-48.

It has been impossible for the Councilor to attend every meeting in the district to which he has been invited but a sincere effort is made in every case. The Councilor has tried to maintain close contact with all events in the district which may be of interest to medical doctors and patients. The Councilor has attended all meetings of the Council as such and the Executive Committee of the Council, except when prevented by absence from the state.

The response of physicians to the increasing responsibility, to the economy of medicine and to the organization of physicians as such has improved during the last year. This particularly is evident in the prompt response to the request for financial support, and to the very keen interest in the extension of the function of the Public Relations Committee and sub-committees.

Very considerable improvement in medical facilities has been accomplished in the district in the last year. Several new doctors have entered the district and new hospital and clinical facilities are being added continuously. Specifically, attention is called to the new management of the hospital in Holdenville, the new Sugg Clinic in Ada and the Baxter Hospital now under construction in Shawnee. The Councilor is grateful to the Vice-Councilor, Dr. Ned Burleson of Prague, for his faithfulness in attending meetings and for his particular interest in the problems of rural health. The Councilor is further indebted to each member of the Association now living in the Seventh District for the privilege of extending acquaintance and attempting to represent properly the wishes of physicians in the Council.

Respectfully submitted,
Clinton Gallaher, M.D.
Councilor, District No. 7

Annual Report of Councilor, District No. 8

To the House of Delegates,
Oklahoma State Medical Association:

In compliance with the provisions of the By-Laws of the Oklahoma State Medical Association it is my pleasure to submit my Annual Report as Councilor representing

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physicians of Okmulgee, Muskogee, Wagoner, Cherokee, Adair, Sequoyah, Delaware, Mayes, Craig and Ottawa Counties.

I have attended all meetings of the Council for the year 1947-48. I have also been privileged to meet with several component County Societies during this period. I have contacted almost all of the County Society Secretaries composing the Eighth Councilor District either in person, by letter, or telephone.

Much interest in organized medicine has been demonstrated by the Societies and it is anticipated that the challenge of the new and important activities to come will be met by the profession in District 8.

Respectfully submitted,
J. G. Edwards, M.D.
Councilor, District No. 8

Annual Report of Councilor, District No. 9

To the House of Delegates,
Oklahoma State Medical Association:

This is my report for the Ninth Councilor's District comprising the counties of LeFlore, Latimore, Haskell, Pittsburgh and McIntosh. There have been two councilor's meetings of the Ninth District this year; one was held in Stigler at the city hall July 20, at which time the members present were honored by the presence of the Honorable William Stigler, who is congressman of the Second District. Mr. Stigler made a brief talk concerning the problems facing organized medicine such as the Wagner-Murray-Dingle Bill. He assured us that he would do all in his power to oppose any bills that had the taste of socialized medicine. Other subjects were discussed by the members of the Stigler meeting including the amalgamation of the Haskell County Society with either the McIntosh or the LeFlore County Medical Societies. No conclusion was reached at that time. The members felt that the meeting was well worth while and the meeting was congenial in every respect. Good fellowship was the order of the day.

This Councilor's District had a meeting in McAlester on the evening of January 20, at the Public Health Center and there was good attendance. The meeting was held jointly with the Pittsburgh County Medical Society and several subjects of interest were discussed. The main subject which received attention was the Public Relations Program which is now sponsored by the Oklahoma State Medical Association and which was written and endorsed by the Public Relations Committee. The group was well-represented from various parts of the Ninth District, and Mr. Clayton Fondren, Associate Executive Secretary of the State Medical Association, was in charge of the meeting and discussed in detail the pro-

gram of the year as it was outlined by the Public Relations Committee. Members present agreed that they would support the program to the fullest extent and expressed thanks to the committee who have labored so hard and earnestly on bringing forth such a fine program for the years 1947-48. Other subjects of interest were discussed freely and we can truthfully and honestly state that the meeting was a success from every standpoint.

Respectfully submitted,
Earl Woodson, M.D.
Councilor, District No. 9

Annual Report of Councilor, District No. 10

To the House of Delegates,
Oklahoma State Medical Association:

In accordance with the By-Laws of the Oklahoma State Medical Association, I herewith submit my report as Councilor representing the Tenth Councilor District of The Oklahoma State Medical Association comprising the following counties: Atoka, Coal, Bryan, Johnston, Marshall, Choctaw, McCurtain and Pushmataha, for the fiscal year 1947-48.

Approximately one year ago we were looking with keen anticipation and hope that the amalgamation of different component societies would greatly benefit us through both advanced medical thinking and good fellowship. However, I am here to report to you that the keen anticipation and hope has lost its force in the pathway of disappointment and disillusionment. This in part is the result of more than one contributing factor.

It is not the opinion of this Councilor that the amalgamation in itself is in error, but quite on the contrary, however, when the members of several societies request the House of Delegates to approve the amalgamation of their component societies; it then should behoove every committee connected either directly or indirectly with the Oklahoma State Medical Association to honor the amalgamation as one unit and only unit, and to do otherwise is to weaken and eventually destroy the amalgamation. This thought is presented here only with the hope that a repetition of an error which accrued in this District may be avoided elsewhere.

I am happy to report that other component societies which have amalgamated are progressing nicely.

It is a genuine pleasure and a distinct honor to serve this District as your Councilor.

Respectfully submitted,
W. K. Haynie, M.D.
Councilor, District No. 10

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1. Arbesman, C. E. et al. *Jl. of Allergy* 17:275, Sept. 1946.

2. Fuchs, A. M. et al. *Jl. of Allergy* 18:385, Nov. 1947.

3. Feinberg, S. M. and Friedlaender, S. *Am. J. Med. Sci.* 213:58, Jan. 1947.

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COMMITTEE REPORTS

Report of Judicial and Professional Relations Committee

The Judicial and Professional Relations Committee submits the following brief report:

We have had under consideration one claim for aid in a malpractice suit. The committee once voted unanimously against recommending payment of this claim. This action was taken after careful consideration of the circumstances attending the suit and the actions of the claimant. However, the Council asked the Committee to review the case and it has been under re-examination by the Committee. Due to the ill-defined regulations governing the assistance fund and the difficulty of securing certain information which the committee thought pertinent, the case is still under consideration.

In the considered judgment of the Committee, however, either the conditions of awarding any payment from the assistance fund should be more clearly defined, or the fund permanently liquidated. We believe the necessity for its continuation no longer exists.

Respectfully submitted,

A. S. Risser, M.D., Chairman
S. A. Lang, M.D.
W. F. Lewis, M.D.
E. A. Johnson, M.D.
E. H. Shuller, M.D.

Medical Education and Hospital Committee

This Committee held no formal sessions during the past year. However, individual members of the Committee have aided in the campaign of the Oklahoma Research Foundation and on the Advisory Committee to President Cross in regard to Medical School activities.

Respectfully submitted,

James Stevenson, M.D., Chairman
Sam McKeel, M.D.
John Carson, M.D.
W. W. Cotton, M.D.
Wann Langston, M.D.
J. H. Veazey, M.D.

Report of Committee on Necrology

The Committee on Necrology submits the following report to the House of Delegates:

Since the last Necrology report in May, 1947, The Almighty in his infinite wisdom has called from our midst 29 of our beloved friends and co-workers. While we bow in sorrow to the will of the Omniscient, we are appreciative of these wonderful men. Physicians, scientists, teachers and friends, and their far-reaching influence which will continue to inspire us to carry on our duties to Humanity.

THEREFORE, BE IT RESOLVED that the House of Delegates of the Oklahoma State Medical Association, recognize the demise of those former 29 Fellow Members and instruct the Secretary to inscribe with honor and regret the following names upon the records of the Association:

A. W. Herron	Vinita	May, 1947
George R. Tabor	Tishomingo	May, 1947
C. G. Spears	Altus	May, 1947
A. A. Weber	Bessie	May, 1947
Lee W. Cotton	Enid	June, 1947
R. L. Browning	Pawnee	June, 1947
J. A. Bates	Okla. City	June, 1947
D. W. Bennett	Sentinel	July, 1947
Philip McCaleb	Morris	July, 1947

William E. Simon	Alva	July, 1947
E. L. Miller	Picher	July, 1947
A. W. Pigford	Tulsa	July, 1947
John M. Watson	Enid	July, 1947
W. A. Ball	Wanette	August, 1947
Zale Chaffin	Barkersfield,	
	Calif.	August, 1947
Catherine Brydia	Ada	August, 1947
G. W. Phillips	Sayre	August, 1947
T. F. Spurgeon	Frederick	August, 1947
A. S. Phelps	Okla. City	August, 1947
W. G. Husband	Hollis	September, 1947
W. W. Sames	Hartshorne	October, 1947
Gayfree Ellison	Pawhuska	October, 1947
H. A. Calvert	Frederick	November, 1947
Roy E. Emanuel	Chickasha	December, 1947
Roy A. Zink	Tulsa	December, 1947
F. L. Carson	Shawnee	December, 1947
E. F. Lewis	Ada	January, 1948
Ralph W. Rucker	Bartlesville	January, 1948
James P. Webb	Durant	February, 1948

Respectfully submitted,

F. W. Boadway, M.D., Chairman
E. S. Lain, M.D.
J. M. Byrum, M.D.

Report of the Committee on the Study and Control of Tuberculosis

The Mobile X-ray Clinic of the Oklahoma County Health Association began taking 70 mm. x-rays February 10, 1947. From then until August 11, 1947, 30,598 x-rays were taken. Of this number there were 130 cases of definite tuberculosis found and 78 suspects. All of these received a card notifying them of the condition and recommending that they consult their regular physician. Those who were unable to secure the services of a private physician were advised to come to the Tuberculosis Dispensary for examination and 14 x 17 x-rays when indicated. If some form of collapse therapy was deemed necessary, an effort was made to place them in a sanatorium. In fact, all patients with active disease who sought advice at the Tuberculosis Dispensary were advised to enter a sanatorium.

On March 2, 1948, approximately 68,000 x-rays had been taken, but detailed data on this additional 37,402 films is not yet available. It was gratifying to note that the incidence of tuberculosis among students at Central and Classen High Schools in Oklahoma City was extremely low.

It is felt that this unit which was purchased with funds obtained through the sale of Christmas Seals is serving a most important phase in the discovery and management of patients with tuberculosis as well as other abnormal chest conditions. In addition several mobile units are being operated by the State in co-operation with the U.S.P.H.S.

The results with streptomycin have been favorable in selected cases. The types of disease in which it is indicated includes acute pneumonic tuberculosis, tracheo-bronchial and laryngeal tuberculosis. It has been proven that the tubercle bacillus develops a resistance to streptomycin and in many instances it merely has a suppressive effect on the disease. Favorable reports have appeared in the literature on the use of Streptomycin and promizole in the treatment of tuberculous meningitis.

Experience has shown that the dosage and frequency of injections of streptomycin can be reduced to ½ Gm.

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Dr. Stokes' detailed treatises based on his own observations helped establish his reputation as a clinician. He thought, as his experiences increased, that others paid too much attention to physical signs, especially in valvular cardiac disease. He believed that the condition of the muscle was much more important than the state of the valves. Stokes' contributions greatly aided the advance of medical knowledge in cardiology.

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every 12 hours with just as good results as when 2 Gm. were given in 24 hours, 333 $\frac{1}{3}$ mg. at four hour intervals.

The Committee recommends that: (1) The salaries at the two State Sanatoria should be increased to such an extent that it will induce competent physicians and nurses to accept positions in these institutions. (2) A program for the rehabilitation of tuberculous patients and an occupational therapy department should be provided at the State sanatoria. A committee on rehabilitation is now endeavoring to work out a plan to present to the Legislature whereby funds may be obtained to establish an in-sanatorium program.

Floyd Moorman, M.D., Chairman

F. P. Baker, M.D.

R. M. Shepard, M.D.

Richard M. Burke, M.D.

Report of the Committee on Conservation of Health

Provisional totals of 1947 reported cases of communicable diseases indicate a continued downward trend for diphtheria, scarlet fever, and pellagra and a low year for poliomyelitis and measles. Case totals for venereal diseases and tuberculosis are slightly lower than in 1946. Incidence of Rocky Mountain spotted fever, tularemia, undulant fever, whooping cough, and chickenpox was somewhat high for the year, and influenza reached epidemic proportions.

Despite epidemic outbreaks in one or two areas, the total reported cases of diphtheria was only 202, approximately nine cases per 100,000 population, as compared with 222 cases in 1946 and 665 cases in 1938. Over a ten-year period scarlet fever has declined from 1,664 cases, about 71 per 100,000 population, to 352, approximately 15 cases per 100,000 population. In 1946, 546 cases were reported. Pellagra dropped from a 1938 total of 259 reported cases to 17 in 1947.

Only 57 cases of poliomyelitis were reported in 1947, which was a considerable decline from the outbreak in 1946 when 434 cases were reported for the year.

Syphilis declined slightly from 7,903 in 1946 to 7,179 in 1947, and gonorrhea, from 11,050 to 9,335. Tuberculosis cases also declined from 2,664 to 2,262.

Rocky Mountain spotted fever in 1947 reached the peak of an increasing trend, with 35 cases reported, as compared with 30 in 1946. The incidence of tularemia has been high for both of the past two years. In 1947, 117 cases were reported and in 1946, 86, as compared with an average of about 32 cases per year for the preceding five years. The number of reported cases of whooping cough for 1947, 1,025, indicated a greater prevalence of the disease than in any year since 1941, when 1,206 cases were reported. Epidemic conditions and improved case reporting combined to give a total of 25,096 cases of influenza reported in 1947. The largest previous yearly total during the past ten years was 14,327 cases reported in 1941.

Meningitis decreased in incidence in 1947, with 58 cases reported, but remained higher than in 1938-1942, during which period a yearly average of approximately 37 cases were reported. The 1947 total for cases of septic sore throat, 186, was slightly higher than for 1946 (180 cases), but lower than for any previous year for which records are available. Similarly, 1947 cases of dysentery, 135, were fewer than in any previous year other than 1946 when only 80 cases were reported.

One or two group paratyphoid infections brought the 1947 total to 70 cases, compared with four in 1946. Typhoid fever cases increased to 93 over the record low of 58 established in 1946.

Cancer was not made a reportable disease until August, 1947.

Heart disease, cancer, and cerebral hemorrhage (embolism, thrombosis, and softening), respectively, caused the highest number of deaths in Oklahoma during 1947, as shown below: Heart diseases, 4,788; cancer, 2,285; cerebral hemorrhage, 1,975.

Respectfully submitted,

Onis Hazel, M.D., Chairman

Glen McDonald, M.D.

W. K. Haynie, M.D.

C. C. Young, M.D.

D. B. Ensor, M.D.

Report of Crippled Children's Committee

The Crippled Children's Committee wishes to report that the Committee on Standardization (as provided by Senate Bill 15, S.L. 1935) has had its regular annual meeting. The hospitals and their medical staffs throughout the State of Oklahoma have been duly appointed and authorized under the Crippled Children's Act to accept and treat children as specified under the rules of their various qualifications.

This Committee has no special recommendations to make over the period of the past year.

Respectfully submitted,

Earl D. McBride M.D., Chairman

L. S. Willour, M.D.

Ben H. Nicholson, M.D.

D. H. O'Donoghue, M.D.

C. A. Traverse, M.D.

W. B. Mullins, M.D.

Ian MacKenzie, M.D.

Report of the Committee on Postgraduate Medical Teaching

The Postgraduate Committee makes the following report:

In February, 1947, the course in Gynecology was started with Dr. J. R. Bromwell Branch of Macon, Georgia, as instructor. From that date the instruction in Gynecology has progressed more than satisfactorily. As intended, this course is primarily on gynecological diagnosis and office management of gynecological problems. As has been brought out before, Dr. Branch has had extensive training as far as formal education is concerned. Added to his formal education, his years of broad experience give him superb foundation for teaching. Dr. Branch's teaching ability and pleasing personality make his lecture periods an investment very much worth while. The course in Gynecology will continue until January, 1949.

At the present time we are seeking an instructor in Internal Medicine as the majority of doctors, to date, wish Internal Medicine to be the next subject taught in the state. It is our hope that we shall find an instructor who will measure up to the many qualifications of Dr. Branch. This would be difficult in normal times but in the present era of doctor shortage and medical teaching demands it will be particularly difficult to obtain the instructor we desire.

The American Cancer Society, the Oklahoma State Health Department and the Oklahoma School of Medicine all have active committees carrying on, or planning, postgraduate courses. It is, therefore, mandatory that each of these organizations, as well as ourselves, map out our postgraduate teaching plans for at least one year in advance and even better for two years.

The Postgraduate Committee of the Oklahoma State Medical Association wishes to take this opportunity to

40

YEARS OF PROGRESS
AND NOW FOR THE NEXT
FORTY • • • •

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- added research personnel
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We have appreciated your confidence in the past. We will earn YOUR CONTINUED FAITH in our future.

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thank The Commonwealth Fund of New York which has been so liberal in its financial aid, and the Oklahoma State Health Department which, through Dr. Grady F. Mathews, continues to be liberal in their aid, moral support and ever present cooperation in carrying out these postgraduate projects. The doctors will be interested in knowing that the present course, which costs him \$15.00, costs the financing agencies \$50.00 per doctor.

Lastly, I wish to thank Mrs. Orene Ramsey, our secretary, for the field work which she has been doing in addition to her normal office duties. The doctors over the state can be very helpful if they will send in their registrations for the course promptly and thereby make it unnecessary for the State Office or our secretary, Mrs. Ramsey, to personally canvass them. It should not be necessary to persuade any doctor to take advantage of this postgraduate opportunity which is brought almost to his door.

Respectfully submitted,

Gregory E. Stanbro, M.D., Chairman
P. S. Anderson, M.D.
Floyd T. Bartheld, M.D.
Alfred T. Baker, M.D.
Homer A. Ruprecht, M.D.
Philip Risser, M.D.
J. Wm. Finch, M.D.
W. F. Bohlman, M.D.
I. F. Stephenson, M.D.

Report of the Committee on Maternity and Infancy

The Maternal Mortality statistics which are collected and analyzed each year disclose the fact that 98 women died as a result of pregnancy and childbirth in the State of Oklahoma between January 1, 1947 and December 31, 1947. On the basis of purely voluntary cooperation, detailed questionnaires were received concerning 83 of these deaths.

In general the causes of death in the state closely followed the general national pattern. The greatest causes of death as usual are the toxemias of pregnancy and deaths from hemorrhage or shock. Also as usual a large percentage of these deaths were entirely preventable.

Caesarian section, as a means of delivery of difficult or dangerous cases, continues to be a major factor contributing to the deaths of these unfortunate women. Since 1941, when this committee began to collect detailed statistics on maternal deaths, it has been discovered that of the women who died in childbirth, approximately 40% of all pregnant women who could conceivably have been delivered by section, were delivered by Caesarian Section and subsequently expired.

During the year conferences have been held with Dr. Grady Mathews, Commissioner of Health, and Dr. Oliver Hodges, Superintendent of Public Instruction. As a result of these conferences Dr. Hodges has expressed his approval of the committee's plan to publish a booklet dealing with the physiology of menstruation and childbirth and has offered his services as making this booklet available to the highschool girls in the state of Oklahoma. Conferences have been held with the directors of such courses at the University of Oklahoma, and this booklet is in the process of preparation. This last move is undertaken because it has long been realized that the greatest single cause of maternal death in the State of Oklahoma comes from the public's lack of cooperation with the available medical profession.

Respectfully submitted,

Edward N. Smith, M.D., Chairman

J. B. Snow, M.D.

C. W. Arrendell, M.D.

Mack I. Shanholtz, M.D.

Report of the Committee on Insurance

The Insurance Committee is composed of three members, John McDonald, M.D., Tulsa, Chairman; Byron Cordonnier, M.D., Enid, and P. K. Graening, M.D., Oklahoma City. Several meetings of the Committee were held during the fiscal year 1947-48 to consider the problems and functioning of the two Association-sponsored insurance programs, i.e., Malpractice, Health and Accident.

The malpractice insurance Master Policy sponsored by the Association wherein a very broad coverage and reduced rate malpractice coverage has been effected, had 869 contracts in force on March 1, 1948. Eighty-four of these insured carry increased limits. It seems appropriate here to point out that a physician cannot increase his protection by making contracts with different insurance companies. If you desire more insurance coverage, increase your insurance in the company with whom you now have insurance! You cannot have duplicate coverage in more than one insurance company. The master malpractice insurance policy is underwritten by the London and Lancashire Company with agents located in principal towns throughout the State.

Thirty-three malpractice claims were made during the period of March 1, 1947 to March 1, 1948. Fifteen claims were settled with \$5,480.00 paid in settlements with \$4,934.97 adjudication and attorney costs, making a total of \$10,414.97. Eighteen malpractice claims remain outstanding as of March 1, 1948. A total of \$12,900.00 has been reserved for this remaining group.

The Health and Accident insurance group program has approximately 1,250 eligible members from the Association membership. The 892 policies that have been issued indicate an approximately 75% coverage of those eligible for the insurance. Since installation of the Health and Accident Program in January, 1946, 189 claims have been paid, totalling \$50,018.22. All of these claims were paid for disability except one \$5,000.00 death payment. Of the above total of 189 claims, some balances remain to be paid which will increase to the \$50,000.00 figure later this year. The Health and Accident insurance program is underwritten by the North American Accident Insurance Company.

Respectfully submitted,

John McDonald, M.D., Chairman

Byron Cordonnier, M.D.

P. K. Graening, M.D.

A.M.A. EXHIBITS WILL INCLUDE ATOMIC ENERGY MEDICAL ESPECTS

The committee on scientific exhibit of the board of trustees met recently in Chicago and made final arrangements for the scientific exhibit at the A.M.A. Chicago session in June. Outstanding features will include special exhibits and demonstrations on fractures, physical medicine, fresh pathology and cancer, with a large display on the medical aspects of atomic energy in conjunction with the Atomic Energy Commission.

A total of 317 disabled World War II veterans have made application to the Oklahoma City regional office of the Veterans Administration for automobiles or other means of transportation.

10th annual CAMP NATIONAL POSTURE WEEK MAY 3-8

GOOD POSTURE IS A GOOD HABIT



Dance of Devotion

BACK POSTURE

The back is formed into a curved shape as the body moves forward. This curve is the natural curve of the spine. It is important to maintain this curve to avoid back pain and other problems.

GOOD POSTURE

When the body is in good posture, the head, neck, shoulders, hips, and ankles are in a vertical line. This is the most balanced and efficient position for the body.

IMPROVED POSTURE IMPROVES APPEARANCE

THE PELVIS IS THE KEYSTONE OF POSTURE

The pelvis is the central part of the body. It is the base upon which the rest of the body is built. If the pelvis is out of alignment, the rest of the body will be out of alignment as well.

GOOD BODY MECHANICS AID PHYSICAL EFFICIENCY

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The Human Back
Its relationship to
POSTURE
and HEALTH



AVAILABLE: Two interestingly illustrated 16 page booklets on posture prepared especially for distribution by physicians to their patients. Their titles: "The Human Back—Its relationship to Posture and Health" and "Blue Prints for Body Balance." Ask for the quantity you need on your professional letterhead. **THE SAMUEL HIGBY CAMP INSTITUTE FOR BETTER POSTURE**, Empire State Bldg., New York 1, N.Y. Founded by S. H. Camp & Company, Jackson, Mich.

In its tenth year, Posture Week will again highlight our year-round program of focusing attention on the significance of good posture as an important element in good health and physical fitness.

Through practical cooperation and voluminous correspondence physicians, educators and lay groups in the field of public health have expressed their appreciation for this work.

Naturally, we hope to again merit the continued cooperation and approval of the medical profession.

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25 YEARS AGO

(from Editorial Notes Personal and General)

Dr. C. L. Rogers, Alva, has located at Gate.

Two hundred thousand dollars proposed for a medical building at Oklahoma City for the medical department, and which seemed sure of passage "went on the rocks of discord" and did not become a law. It is said the defeat of the proposal came about over the attempt to divide the sum into two parts, a \$75,000 building to be located at Norman, the remainder to go into a building at Oklahoma City. "United We Stand," sometimes.

Dr. R. M. Howard, Oklahoma City, sends the Journal a remembrance from Rio De Janeiro, where he is attending the Brazilian Expedition.

Dr. J. M. Alford, Oklahoma City, was recently initiated into the Phi Beta Pi, the professional medical fraternity of Oklahoma University.

... The Tulsa Medical Association, the host of the 1923 convention, numbers 150 members at the present time. Because of the 100 miles of concrete roads leading into Tulsa, members living in the rural districts and surrounding towns are enabled to reach the city in a short time no matter what the weather. These good roads mean much towards attendance and enthusiasm at association meetings. Regular meetings are held in the auditorium in the Municipal Building. This meeting place is furnished without charge by the city.

It is of interest to the people of Tulsa to know that the president of the Oklahoma State Medical Association for the ensuing year is to be Dr. Ralph V. Smith of their city.

MEDICAL SOCIETIES AROUND THE STATE

Kay-Noble Counties

C. R. Rountree, M.D., Oklahoma City, spoke on "Sub-Trochanteric Fractures of the Femur" when he addressed the Kay-Noble County Medical Society recently. He also showed slides on the comparatively new procedure in treatment of fractured hips by inserting pins through the intermedullary canal. Glen Kreger, M.D., Tonkawa, president of the group, was in charge of the program.

Garfield County

"Indications for a Fenestration Operation to Improve Hearing" was W. L. Bonham, M.D., Oklahoma City, topic when he was guest speaker at the regular monthly dinner meeting of the Garfield County Medical Society. Approximately 35 members attended the meeting.

Tillman County

G. A. Tallant, M.D., was elected president of the Tillman County Medical Society at a recent meeting held in Frederick. Other officers elected were: F. P. Fry, M.D., vice-president; O. G. Bacon, M.D., secretary; R. L. Fisher, M.D., delegate; W. A. Fuqua, M.D., alternate. Drs. Fisher, Fry and Fuqua were named censors.

Carter County

Everett S. Laiu, M.D., Oklahoma City, Richard R. Stoll, M.D., Chickasha, and Earl Muntz, M.D., Ada, members of the state mobile cancer clinic staff, were guests of the Carter County Medical Society at their meeting March 5. Dr. Stoll exhibited and explained the use of the Larson guide for the place of the Smith Peterson nail in fractures of the neck of the femur and Dr. Lain gave an informal but comprehensive resume of some of the recent advances in cancer research.

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ANNUAL AUDIT

Paul B. Champlin, M.D., President
Oklahoma State Medical Association
210 Plaza Court
Oklahoma City, Oklahoma
Dear Sir:

March 19, 1948

We have completed the Audit of the Financial Records of:

THE OKLAHOMA STATE MEDICAL ASSOCIATION

Oklahoma City, Oklahoma

for the period January 1, 1947 to December 31, 1947 and submit herewith the following exhibits:

EXHIBIT "A"—Balance Sheet

EXHIBIT "B"—Statement of Cash Receipts and Disbursements

EXHIBIT "C"—Operating Statement

EXHIBIT "D"—Bank Reconciliations

We wish to thank you for this Audit, and if we can be of further service, please feel free to call upon us.

Respectfully Submitted

H. E. COLE COMPANY

/s/ H. J. Cole

HJC:db

OKLAHOMA STATE MEDICAL ASSOCIATION

Oklahoma City, Oklahoma

BALANCE SHEET

December 31, 1947

EXHIBIT "A"

ASSETS

<i>CURRENT ASSETS</i>	<i>Total</i>	<i>Membership</i>	<i>Publicity</i>	<i>Journal</i>	<i>Medical Defense</i>	<i>State Fair</i>
Petty Cash	\$ 100.00	\$ 100.00	\$	\$	\$	\$
Bank	24,554.62	14,772.96	7,281.88	2,081.57	419.34	61.87
Total Current Assets	\$24,654.62	\$14,872.96	\$ 7,281.88	\$ 2,018.57	\$ 419.34	\$ 61.87
<i>INVESTMENTS</i>						
United States Bonds	\$12,398.88	\$12,398.88	\$	\$	\$	\$
Total Assets	\$37,053.50	\$27,271.84	\$ 7,281.88	\$ 2,018.57	\$ 419.34	\$ 61.87
<i>LIABILITIES</i>						
<i>CURRENT LIABILITIES</i>						
Accrued Withholding Tax	\$ 554.80	\$ 387.20	\$	\$ 167.60	\$	\$
Accrued Social Security Tax	45.78	28.98	.....	16.80	.....	.....
Total Current Liabilities	\$ 600.58	\$ 416.18	\$	\$ 184.40	\$	\$
Operating Reserve	\$36,452.92	\$26,855.66	\$ 7,281.88	\$ 1,834.17	\$ 419.34	\$ 61.87
TOTAL LIABILITIES	\$37,053.50	\$27,271.84	\$ 7,281.88	\$ 2,018.57	\$ 419.34	\$ 61.87

OKLAHOMA STATE MEDICAL ASSOCIATION

Oklahoma City, Oklahoma

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS

January 1, 1947 to December 31, 1947

EXHIBIT "B"

	<i>Total</i>	<i>Membership</i>	<i>Publicity</i>	<i>Journal</i>	<i>Medical Defense</i>	<i>State Fair</i>
Cash Balance Jan. 1, 1947.....	\$21,307.67	\$ 3,689.44	\$15,759.97	\$ 1,377.05	\$ 419.34	\$ 61.87
Petty Cash	20.00	20.00	.....	.....	.....	.....
<i>RECEIPTS</i>						
Membership Dues	34,696.00	34,696.00	.....	.....	.....	.....
Repay State Fair	426.00	426.00	.....	.....	.....	.....
Refund on C-G Ticket	77.29	77.29	.....	.....	.....	.....
Rural Health Refund	15.27	15.27	.....	.....	.....	.....
Refund Post Grad. Comm.	223.04	223.04	.....	.....	.....	.....
U. S. Bond Interest	302.50	302.50	.....	.....	.....	.....
Annual Meeting	5,122.00	5,122.00	.....	.....	.....	.....
Special Assessment	13,000.00	.....	13,000.00	.....	.....	.....
Advertising and Subs.	18,129.10	.....	.....	18,129.10	.....	.....
General Fund	23.52	.....	.....	23.52	.....	.....
Total Cash to be accounted for	\$93,342.39	\$44,571.54	\$28,759.97	\$19,529.67	\$ 419.34	\$ 61.87
<i>DISBURSEMENTS</i>						
Expenses to Dec. 31, 1947	\$69,288.35	\$30,114.76	\$21,478.09	\$17,695.50	\$	\$
Less Accruals W.H. and S.S.	600.58	416.18	.....	184.40	.....	.....
.....	\$68,687.77	\$29,698.58	\$21,478.09	\$17,511.10	\$ 419.34	\$ 61.87
RECEIPTS OVER DISBURSEMENTS	\$24,654.62	\$14,872.96	\$ 7,281.88	\$ 2,018.57	\$ 419.34	\$ 61.87
Bank Balance, Dec. 31, 1947	\$24,554.62	\$14,772.96	\$ 7,281.88	\$ 2,018.57	\$ 419.34	\$ 61.87
Petty Cash	100.00	100.00	.....	.....	.....	.....
.....	\$24,654.62	\$14,872.96	\$ 7,281.88	\$ 2,018.57	\$ 419.34	\$ 61.87

REPORTS

OKLAHOMA STATE MEDICAL ASSOCIATION

Oklahoma City, Oklahoma

OPERATING STATEMENT

EXHIBIT "C"

January 1, 1947 to December 31, 1947

<i>REVENUES</i>	<i>Total</i>	<i>Membership</i>	<i>Publicity</i>	<i>Journal</i>	<i>Medical Defense</i>	<i>State Fair</i>
Membership Dues	\$34,696.00	\$34,696.00	\$.....	\$.....	\$.....	\$.....
Repay State Fair	426.00	426.00	.....	.....	.....	.....
Refund on C.G. Ticket	77.29	77.29	.....	.....	.....	.....
Rural Health Refund	15.27	15.27	.....	.....	.....	.....
Refund Post Grad. Comm.	223.04	223.04	.....	.....	.....	.....
U. S. Bond Interest	302.50	302.50	.....	.....	.....	.....
Annual Meeting	5,122.00	5,122.00	.....	.....	.....	.....
Special Assessment	13,000.00	.....	13,000.00	.....	.....	.....
Advertising and Subscr.	18,129.10	.....	.....	18,129.10	.....	.....
General Fund	23.52	.....	.....	23.52	.....	.....
Total Revenues	\$72,014.72	\$40,862.10	\$13,000.00	\$18,152.62	\$.....	\$.....
<i>EXPENSES</i>						
Salary—Executive Secy.	\$ 7,400.04	\$ 6,500.04	\$.....	\$ 900.00	\$.....	\$.....
Salary—Associate Secy.	<u>3,350.60</u> 5,620.00	2,720.00	.....	2,900.00	.....	.....
Salary—Office	<u>6,326.98</u> 1,056.98	2,089.85	47.13	1,920.00	.....	.....
Salary—Editor	1,200.00	.....	.....	1,200.00	.....	.....
Comm. on Directory Adv.	88.87	.....	.....	88.87	.....	.....
Telephone and Telegraph	858.02	858.02	.....	.....	.....	.....
Postage	916.57	916.57	.....	.....	.....	.....
Office Rent	1,500.00	875.00	.....	625.00	.....	.....
Stationery and Printing	564.95	514.66	.....	50.29	.....	.....
Office Supplies	1,072.39	1,072.39	.....	.....	.....	.....
Traveling	1,328.07	1,328.07	.....	.....	.....	.....
Audit and Legal	225.00	225.00	.....	.....	.....	.....
C-G Meeting Expense	113.33	113.33	.....	.....	.....	.....
Transfer to Publicity Aect.	1,450.00	1,450.00	.....	.....	.....	.....
Express	1.16	1.16	.....	.....	.....	.....
General Expense—Ex. Sec. and Associate	1,093.58	1,093.58	.....	.....	.....	.....
A.M.A. Delegation Exp.	534.86	534.86	.....	.....	.....	.....
Public Policy Comm. Exp.	486.40	486.40	.....	.....	.....	.....
Post Graduate Committee	2,000.00	2,000.00	.....	.....	.....	.....
Transfer to Journal Fund	23.52	23.52	.....	.....	.....	.....
Frames	10.69	10.69	.....	.....	.....	.....
Want Ads for employees	27.72	27.72	.....	.....	.....	.....
Flowers	39.77	39.77	.....	.....	.....	.....
Council H. of D.	6.60	6.60	.....	.....	.....	.....
Conf. of Pres.	25.00	25.00	.....	.....	.....	.....
Vet. Care Comm.	180.36	180.36	.....	.....	.....	.....
Shearon Med. Leg Service	100.00	100.00	.....	.....	.....	.....
Moving Light and Fixture	4.80	4.80	.....	.....	.....	.....
Bank Box Rent	6.00	6.00	.....	.....	.....	.....
Typewriter Repairs	17.58	17.58	.....	.....	.....	.....
Woodward Relief Fund	100.00	100.00	.....	.....	.....	.....
Annual Meeting Expense	5,342.12	5,342.12	.....	.....	.....	.....
Social Security Expense	30.94	19.17	.....	11.77	.....	.....
Subscription	34.50	.....	.....	34.50	.....	.....
Postage	150.79	.....	150.79	.....	.....	.....
Binding	27.50	.....	.....	27.50	.....	.....
Printing and Mailing	9,199.72	.....	.....	9,199.72	.....	.....
Engraving	518.01	.....	.....	518.01	.....	.....
Press Clipping Service	144.84	.....	.....	144.84	.....	.....
Auditing Legal	75.00	.....	.....	75.00	.....	.....
Advertising	21,280.17	.....	21,280.17	.....	.....	.....
Refund on Dues	1,432.50	1,432.50	.....	.....	.....	.....
TOTAL EXPENSES	\$69,288.35	\$30,114.76	\$21,478.09	\$17,695.50	\$.....	\$.....
Revenue Over Expenses	\$ 2,726.37	\$10,747.34	—\$8,478.09	\$ 457.12	\$.....	\$.....

OKLAHOMA STATE MEDICAL ASSOCIATION

Oklahoma City, Oklahoma
BANK RECONCILIATION
December 31, 1947

EXHIBIT "D"

JOURNAL FUND

Balance as per Bank Statement, Dec. 31, 1947		\$ 2,202.94
Checks Outstanding 1986.....	\$ 6.00	
2594.....	89.50	
2598.....	88.87	184.37

Balance as per Books		\$ 2,018.57
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MEMBERSHIP FUND

Balance as per Bank Statement, Dec. 31, 1947		\$14,872.96
Checks Outstanding 2155.....	\$ 55.00	
2281.....	2.50	
2576.....	2.50	
2599.....	40.00	100.00

Balance as per Books		\$14,772.96
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PUBLICITY FUND

Balance as per Bank Statement		\$ 7,281.88
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Balance as per Books		\$ 7,281.88
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MEDICAL DEFENSE

Balance as per Bank Statement, Dec. 31, 1947		\$ 419.34
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Balance as per Books		\$ 419.34
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STATE FAIR

Balance as per Bank Statement, Dec. 31, 1947		\$ 61.87
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Balance as per Books		\$ 61.87
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BOOK REVIEWS

ADVANCES IN MILITARY MEDICINE. The Committee on Medical Research. Edited by E. C. Andrus, D. W. Bronk, G. A. Carden, Jr., C. S. Keefer, J. S. Lockwood, J. T. Wearn, M. C. Winternitz, and Tuckerman Day, associate editor. 900 pages. Two volumes. Price \$12.50. Boston: Little, Brown and Company, 1948.

This book (two volumes) contains a broad summation of the medical research conducted by the Office of Scientific Research and Development (OSRD) in the interests of our national defense. Written insofar as practicable in non-technical language, it constitutes a report to the public of advances in medicine which, although primarily designed to promote the health and welfare of our armed forces, cannot fail to accrue to the permanent advantage of the civilian population. The report is necessarily incomplete and lacking in technical detail; the definitive records will be found in the medical and scientific journals and monographs.

The book begins with an account of the research on the more prevalent medical conditions of particular interest to the armed forces. The Committee on Medical Research sponsored laboratory studies to develop new methods of protection against several types of infection and organized research designed to improve the treatment of others. Much valuable information was obtained concerning the prevention and treatment of venereal diseases. New chemotherapeutic agents were found for many of the tropical diseases and light has been thrown on the biologic requirements of these parasites and the nature of the disease produced by each in the experimental animal. The newest developments on medical problems of convalescence are discussed.

The next section of Volume I deals with surgery: The objectives of wartime research on problems arising from combat injuries were concerned not so much with the

evolution of new basic concepts as with the development and testing of procedures designed to make available to the military surgeon the detailed practical application of fundamental knowledge already in existence. In this connection, the following problems are discussed: (1) treatment of the wounded soldier as to the saving of his life, (2) control of infection in wounds of battle, (3) pressure-dressing method of treatment of burns, (4) restoration of injured nerve and brain tissue, (5) wound ballistics; and (6) such special problems as frost bite and trench foot, development of better surgical sutures, improved materials for controlling hemorrhage, and more accurate and dependable x-ray techniques.

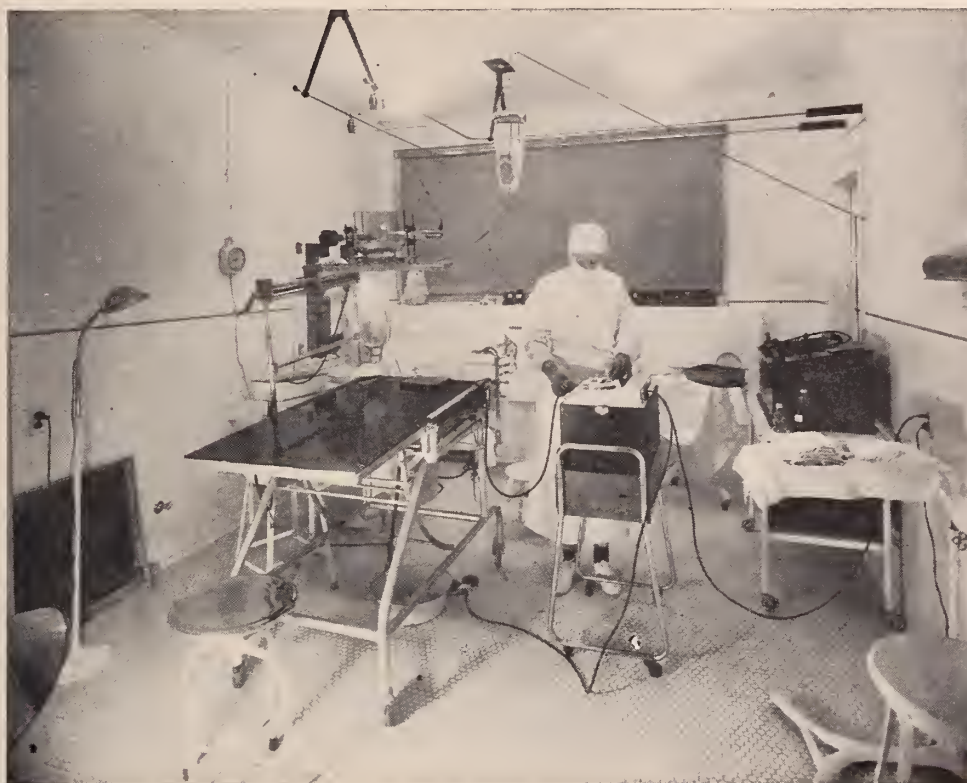
Problems peculiar to aviation medicine are discussed. Detailed accounts of the research in this field are given in the next 100 pages.

Physiology research is the succeeding topic and the self-explanatory chapters under this heading are: shock, plasma fractionation, blood substitutes, methods of preservation of whole blood, problems of nutrition, acclimatization to heat and cold, protective clothing, and water disinfection.

The next section of the book deals with the research on chemical warfare agents and then follows a discussion of anti-pest agents adrenocortical steroids, new anticalarial drugs and penicillin are treated in separate sections.

The last chapter is titled "Sensory Devices" and concerns the development of scientific aids for the blinded veterans of the war.

The book has a very detailed bibliography and contains 94 illustrations. Unfortunately, it is printed in rather small type and is tedious reading. The two volumes serve as a valuable reference but it is doubtful if the average practitioner would care to read them in their entirety.—J. W. Morrison, M.D.



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	T. H. Briggs, M.D., Coalgate	J. J. Hipes, M.D., Coalgate
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Harmon	C. N. Talley, M.D., Hollis	R. H. Lynch, M.D., Hollis
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	Geo. H. Kimball, M.D., Oklahoma City	Edward M. Farris, M.D., Oklahoma City
	W. W. Rueks, Jr., M.D., Oklahoma City	L. C. Taylor, M.D., Oklahoma City
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	Howard B. Shorbe, M.D., Oklahoma City	R. Q. Goodwin, M.D., Oklahoma City
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	C. H. Haddox, M.D., Pawnee	M. L. Saddoris, M.D., Cleveland
	C. M. Bassett, M.D., Cushing	H. C. Manning, M.D., Cushing
	C. W. Moore, M.D., Stillwater	F. Keith Oehlschlager, M.D., Yale
Pittsburg	C. E. Lively, M.D., McAlester	T. H. McCarley, M.D., McAlester
Pontotoc-Murray	E. D. Padbeig, M.D., Ada	M. M. Webster, M.D., Ada
	J. B. Morey, M.D., Ada	C. F. Needham, M.D., Ada
Pottawatomie	E. Eugene Rice, M.D., Shawnee	John M. Carson, M.D., Shawnee
	William M. Gallaher, M.D., Shawnee	C. C. Young, M.D., Shawnee
Rogers		
Seminole	Mack Shanholtz, M.D., Wewoka	A. A. Walker, M.D., Wewoka
Stephens	Everett King, M.D., Duncan	Wallis S. Ivy, M.D., Duncan
Texas	F. P. Cawley, M.D., Hooker	E. L. Buford, M.D., Guymon
Tillman	R. L. Fisher, M.D., Frederick	W. A. Fuqua, M.D., Grandfield
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	M. V. Stanley, M.D., Tulsa	I. H. Nelson, M.D., Tulsa
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	W. A. Dean, M.D., Tulsa	A. Ray Wiley, M.D., Tulsa
	John G. Matt, M.D., Tulsa	Charles H. Eads, M.D., Tulsa
	Andre B. Carney, M.D., Tulsa	Logan A. Spann, M.D., Tulsa
Washington-Nowata	Thomas Wells, M.D., Bartlesville	J. V. Athey, M.D., Bartlesville
	L. D. Hudson, M.D., Bartlesville	H. E. Denyer, M.D., Bartlesville
Washita	Felix Adams, M.D., Nowata	S. A. Lang, M.D., Nowata
Woods	James F. McMurry, M.D., Sentinel	A. H. Bungardt, M.D., Cordell
	John F. Simon, M.D., Alva	C. A. Traverse, M.D., Alva

ASSOCIATE MEMBERSHIP

The following applications have been presented for Associate Membership. The applications are in order for presentation to the Council and House of Delegates:

K. W. Navin, M.D., Shawnee, Okla.
T. F. Crabbe, M.D., Tahlequah, Okla.

HONORARY MEMBERSHIP

The following applications have been received for Honorary Membership.

S. M. Parks, M.D., Bartlesville
J. P. Beam, M.D., Arnett
O. E. Howell, M.D.
T. F. Renfrow, M.D., Billings
P. H. Anderson, M.D., Anadarko
C. M. Maupin, M.D., Waurika
Robert M. Alexander, M.D., Paoli
Joseph G. Breco, M.D., Ada
John R. Walker, M.D., Enid
W. M. Yeargan, M.D., Hollis
O. J. Street, M.D., Gould
James I. Lyon, M.D., Edmond
Charles E. Barker, M.D., Oklahoma City
O. W. Rice, M.D., McAlester
G. A. Comp, M.D., Manitou
P. H. Mayginnnes, M.D., Tulsa

LIFE MEMBERS

The following applications have been received for Life Membership.

O. E. Templin, M.D., Alva
Robert S. Love, M.D., Oklahoma City
John W. Shelton, M.D., Oklahoma City
E. P. Hathaway, M.D., Lawton
M. B. McBrayer, M.D., Idabel
E. A. Kelleam, M.D., Wright City
John P. Torrey, M.D., Bartlesville
J. V. Athey, M.D., Bartlesville
Henry W. Larkin, M.D., Guthrie
C. B. Hill, M.D., Guthrie
D. C. McCalib, M.D., Colbert
H. M. Reeder, M.D., Konawa
S. L. Burns, M.D., Stonewall
T. L. Seaborn, M.D., Ada
John E. Tompkins, M.D., Yukon

AMALGAMATIONS

The following have made application for amalgamation of county societies. All requirements have been met and the application is in order for presentation to the Council and House of Delegates:

Washita Kiowa County Medical Societies

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HAVE YOU HEARD

Leslie T. Hamm, M.D., Lawton, addressed the Optometrist Club of that city recently on the topic "Man, His Past, Present and Future."

C. H. Guild, Sr., M.D., Shidler, was one of the few people to celebrate a birthday February 29. Members of his family and friends gathered in Shidler to help him celebrate his "14th" birthday.

Port Johnson, M.D., Muskogee, spoke on "Health, Physical and Mental" at the second of a series on human relations for the Muskogee P.T.A.

John Hubbard, M.D., Oklahoma City, was elected grand master of the Oklahoma grand lodge in the final session at the annual meeting held in February in Guthrie.

Howard Puckett, M.D., Stillwater, was elected secretary-treasurer of the Oklahoma region of the International College of Surgeons.

H. K. Speed, M.D., Sayre, has been counting pulse beats with the same timepiece for the past 35 years, an article in a Sayre newspaper reports.

Clyde Keruek, M.D., Holdenville, was guest speaker on "Crippled Children" at the Holdenville Business and Professional Women's club.

F. H. Sisler, Jr., M.D., Bristow, has been awarded the presidential citation as a member of squadron 98 aboard the carrier "Lunga Point." The citation was for bombing and strafing operations on Japan and Okinawa while based in the China Sea.

Charles W. Letcher, M.D., Miami, has been awarded the navy commendation medal for "outstanding heroism in action against the enemy Japanese forces in the air, ashore and afloat during the Luzon operation, January 4 to 15, 1945, and the Okinawa Gunto campaign from June 9 to 20, 1945." A former flight surgeon, he previously was awarded the purple heart, two silver star medals, the surgeon's medal and the Philippines medal.

Harl D. Mansur, Jr., M.D., announces the opening of his office at 304 Hamilton Building, Wichita Falls, Texas. Dr. Mansur is formerly of Ardmore.

CLASSIFIED ADS

FOR SALE: General Electric mobile x-ray unit, complete with radiographic and fluoroscopes. Cost \$1500. Used very little. Price, \$800. Write Key C, care of the Journal.

FOR SALE: One Wappler x-ray machine with vertical and horizontal fluoroscope in good condition. Price \$250; must sell at once. Call, write or wire, C. N. Talley, M.D., Hollis, Okla.

MEDICAL SCHOOL

CALENDAR — APRIL, 1948

SURGICAL PATHOLOGIC CONFERENCES — Each Tuesday 11:00 A.M. to 12:00 Noon.

MEDICAL CONFERENCES — Each Wednesday 9:00 A.M. to 10:00 A.M.

CLINICAL PATHOLOGICAL CONFERENCES — Each Thursday 11:00 A.M. to 12:00 Noon.

TUMOR CLINICS AND CONFERENCES — First and Third Tuesday (April 6 and 20) 8:00 A.M. to 9:00 A.M.

UROLOGICAL PATHOLOGIC CONFERENCE — Second Tuesday (April 13) 8:00 A.M. to 9:00 A.M.

ORTHOPEDIC PATHOLOGICAL CONFERENCE — Last Tuesday (April 27) 8:00 A.M. to 9:00 A.M.

MONTHLY STAFF MEETING — Second Friday (April 9) Dinner, 6:15 P.M.

RADIOLOGIC CONFERENCE — Fourth Monday (April 26) 6:45 P.M. to 7:30 P.M.

Dr. George C. Guthrey (Med '44) has recently been revealed as the sponsor of Walter Starnes, mental hospital attendant at Winter Veterans Administration Hospital, Topeka, Kansas, who won the first psychiatric aid of the year award. Dr. Guthrey is now completing his first year at the V.A. school of psychiatry at Topeka.

Announcement has been made of the coming marriage of Dr. Alden I. Angerer (Med '46) and Miss Sylvia Louise Mason of Tulsa. Dr. Angerer, a first lieutenant in the army medical corps, is stationed at Fort Kearney, Nebraska. The marriage will take place in Tulsa on April 18.

PSYCHIATRIC ASSOCIATION DIRECTOR NAMED

Daniel Blain, M.D., formerly chief of neuropsychiatric services for the Veterans Administration, has accepted the newly established position of medical director of the American Psychiatric Association. The position has been created to provide the full-time services of a medical man who will act for the association as an authorized source of information and advice. As medical director, Dr. Blain will make his services available to the membership, to affiliate societies and to public and private organizations interested in the field of psychiatry.

VALLEY VIEW HOSPITAL IS "READY TO SERVE"

Erected in 1937, Valley View Hospital at Ada was built with funds donated in part by the Commonwealth Fund of New York and in part by citizens of Ada and the surrounding area. One of the best equipped hospitals of its size in the state, its buildings cost approximately \$300,000 when they were built.

Recent facts released about the hospital reveal that in 1947 the hospital admitted 4,248 patients—approximately one-fourth the population of Ada. The patients stayed a total of 22,257 days. If every person in Ada had spent one day in the hospital, all of Coalgate in nearby Coal county would have had to be brought in to make up that number. A total of 724 babies were born in the hospital in 1947, enough to populate the town of Stonewall near Ada. In 1947, \$22,210.93 was charged off to charity at the hospital. Other figures show that among the food and equipment used were 11,648 quarts of milk and tons of linens and gowns.



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ANNOUNCEMENTS

NEUROPSYCHIATRIC HEAD IS NAMED BY VA

Appointment of Harvey J. Tompkins as head of the neuropsychiatric service in Veterans Administration Department of medical and surgery was announced recently by Paul B. Magnuson, M.D., chief medical director.

Dr. Tompkins is a native of Chicago, Ill. He obtained his education at Loyola University, Chicago, receiving his B.S. degree in 1929 and his M.D. in 1932. He interned at Mercy Hospital, Chicago and joined the VA in 1935.

APPLIED NUTRITION ACADEMY CONVENTION DATE SET

Twelve eminent nutrition authorities will present essays at the 1948 meeting of the American Academy of Applied Nutrition at the meeting slated for April 15, 16, and 17 at the Fairmont Hotel in San Francisco. Inquiries should be addressed to the American Academy of Applied Nutrition, 1226 Wilshire Blvd., Los Angeles 14, Calif.

STERILITY STUDY SOCIETY TO MEET

The American Society for the Study of Sterility is holding its fourth annual national session June 21 and 22, 1948 at the Congress Hotel in Chicago. The two-day program will be divided into a special series of panel discussions on male infertility, with papers to be read on female and miscellaneous infertility aspects on the second day. For information write Dr. John O. Haman, 490 Post Street, San Francisco 2, Calif.

N.G.A. SCHEDULES SESSION

The National Gastroenterological Association will hold its 13th scientific session at the Hotel Pennsylvania in New York City June 7-10, 1948. The program this year will again consist mostly of symposia and there will be one panel discussion. Further details and a copy of the program may be obtained by writing to the Secretary, National Gastroenterological Association, 1819 Broadway, New York 23, New York.



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THE JOURNAL

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OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

38534 DOCTORS DISAPPROVE

In the February 21 issue of the British Medical Journal under the above title we find a long discussion of a shocking situation. A few lines lifted from this editorial will give our readers an idea of what some of our own government officials and bureaucrats wish to do to medicine in the U. S.

"By a 9 to 1 majority in an 84 percent poll the medical profession has shown Mr. Bevan how completely he has misjudged the thoughts and feelings of the medical men and women of this country, and how ill-timed, inept, and untrue were his vicious remarks about raucous-voiced and politically poisoned people. His attempt to find a narrow target for his vituperation has failed completely. By their votes British doctors have shown what they think of his recent observations and the National Health Service Act in its present form. The medical profession and some of its leading personalities have during the last few weeks been subjected by certain newspapers to misrepresentation and personal abuse: 90 percent of all those voting have made the only fitting response to this. This is a truly remarkable result, and a confirmation, incidentally, that in these columns we have voiced what are the ideas and feelings of the great majority of doctors in this country. The policy and actions of the British Medical Association in relation to the present controversy have now been fully vindicated.

"... But out of the 2,392 men and women working whole-time in the Public Health Service, 1,928 disapprove of the Act in its present form, and only 316 approve of it. *Of the 762 medical men and women working whole-time in Government service, 634 disapprove of the Act, and only 127 express their approval.* This result deserves to be italicized. Of the 548 whole-time research workers, 220 disapprove, and 104 approve. These are, indeed, instructive figures. One may assume that those in whole-time employment are not particularly interested in the question of buying and selling practices, or in the basic salary or in the tapering capitation fee, or possibly, even in negative

direction. Some of them, no doubt, in their disapproval are expressing their sense of solidarity with the rest of the medical profession; some of them, too, feel affronted by the unmannerly and unfair treatment meted out by Mr. Bevan to practising doctors. Whatever may be the constitutional niceties of the right of appeal to the Courts against dismissal in the National Health Service, many, we believe, are gravely disquieted by the fact that in a State Medical Service available to the whole of the community a man's life and career may be ruined by the decision of a tribunal of three men, of whom only one has a legal training. The General Medical Council is the statutory body for dealing with cases of professional misconduct. In the future the Ministry of Health will be able to get rid of what it will regard as an unsatisfactory servant, and that servant will then have no alternative but to emigrate or try to gain a livelihood in another occupation for which he has not been trained. This power of the State over an individual highly and lengthily trained to do one kind of work is indeed alarming in its enormity. The more highly skilled a man is the less easily is he adaptable to alternative forms of work. That is the penalty of specialization. But in England to-day we find men of all political parties ready to give the State this unbelievable control over individual freedom. Mr. Bevan should take note that many medical men are already emigrating, or seeking to emigrate, from this country in order to escape the new servitude.

"... Mr. Bevan should now know that this opposition is not just the agitation of a political caucus or what *The Times* unkindly described as "the views of a score of elderly doctors." Parliament and public opinion will not realize that even if Mr. Bevan succeeds by financial pressure in coercing doctors into the Service on July 5 he will have in his service 38,534 unwilling and dissatisfied workers."

In the light of Great Britain's predicament should we passively drift toward our own destruction or should we load the desks of our representatives with the facts about

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socialized medicine and kindly but firmly protest against the repeated threats of regimentation of patients and their physicians.

THE COUNTRY DOCTOR

The medical student, the intern and the young house physician anxiously waiting for opportunity should remember that "all is not gold that glitters." Often success is in the silences and greatness finds its genesis in obscurity. Coveted goals capping the heights are for those who quietly gather strength on the way up. Throughout the history of medicine opportunity has favored the country doctor. Service, the shining secret of the good life, is his shibboleth, his chief incentive, creating the urge for accomplishment. Honest work in quiet places far from the distracting marts of commerce accompanied by worthy ambition may spin the golden thread which leads to the abiding satisfactions of genuine success.

Many of the blessings and opportunities and skills now cherished by the modern city physician must be directly or indirectly accredited to the wisdom and ingenuity of the country doctor. A few examples will suffice.

Every time a failing heart responds to digitalis credit must go to William Withering whose clinical and experimental investigations while he was still a country doctor at Stafford, led to the discovery of the therapeutic value of foxglove.

Every time a child receives protection against smallpox through vaccination and indirectly when he receives immunity shots against other diseases, thanks must travel back to Edward Jenner and his dairy maid far removed from the city of London where he served as house pupil under John Hunter. What city doctor has added two and one-half years to the life of every man for all time.

Every time tuberculosis is discovered and successfully managed, both doctor and patient must hark back to the lonely Adirondacks where Edward Livingston Trudeau in total medical isolation, conceived the essential symptomatic, pathogenic, epidemiologic and therapeutic truths connected with the disease and laid down the principles of management.

Many other examples are available but these are among those most deserving of the world's applause and best exemplifying the rewards which may come even in this day to the patient, sagacious, conscientious country doctor.

Admitting that all who strive may not attain worldly fame it is comforting to know that so great an authority as Sir Thomas Brown has lifted them above those remembered "Who knows whether the best of men be known, or whether there be not more remarkable persons forgot, than any that stand remembered in the account of time."

PRIVATE RELATIONS

With few exceptions the doctors' general relations with the public are good but there are some reasons for believing that their private professional relations are not always satisfactory. Through the numerous channels of publicity and through daily conversation it is obvious that there are many unhappy patient-doctor relationships. In many respects this vital relationship is more difficult than ever before. This is largely due to the rapid advances in medical science and the extra demands this progress has placed upon the doctor. Often he is so busy combating the disease he forgets the patient. Though conditions have changed, human nature does not destroy the deep seated need for that primal sympathy of man for man in which medicine found its origin. Medicine without sympathy is like bread without savor. Sympathy brings response to needs, sympathy finds time to listen, sympathy makes obvious the desire to help, sympathy wins esteem and holds friendship and respect.

Repeatedly, it has been said that if every doctor did his full duty in connection with each of his professional contacts and sealed his patient-doctor relationships with a sympathetic understanding, so-called public relations would be unnecessary.

Every morning in Oklahoma approximately 2000 doctors start on their daily rounds. Granting that they have an average of only 10 professional contacts, the day chalks up 20,000 opportunities for good will as well as service. In the course of a year the daily average of 10 counts up to 7,300,000. If every doctor sees that every call meets the patient's approval, the medical profession will reap a full measure of public esteem. This can happen only when the doctor is rich in sympathy, wise in speech and sound in action.

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Oklahoma City, Oklahoma

SCIENTIFIC ARTICLES

CARCINOMA OF THE BODY OF THE UTERUS*

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In reviewing the literature on carcinoma of the uterus, one may gain the impression that there has been some complacency among doctors in regard to the involvement of the body of the uterus itself. There are many, many articles on carcinoma of the cervix while there are a limited number relative to malignancies of the body of the uterus. It is estimated that carcinoma of the uterus is responsible for 30 percent of all deaths from gynecological disease. There are more deaths from malignancy of the uterus than any other organ in the female. Malignancy of the fundus comprises about 10 to 15 percent while 85 to 90 percent involve the cervix. Statistics show that the uterus and the stomach are about equal in the number of lesions. This so-called complacency may be due to the fact that there is an impression that the prognosis of carcinoma of the fundus is rather favorable when compared to carcinoma of the cervix.

Cancer of the body of the uterus is primarily a disease of later life, the greater number of cases appearing between the fifth and sixth decades. Miller of Ann Arbor reports that in his group of cases the average age was 54 years; Morrin and Max of St. Louis, Morris and Dunn, Sheffey, Heyman, Ward and Sackett and many other well known gynecologists report that their percentage runs about the same. Morrin of St. Louis reports that his youngest patient was 19 and the eldest was 77 years of age. This calls our attention to the fact that carcinoma may involve the body of the uterus even in young women. In reviewing the records of cancer cases admitted to Hillcrest Memorial Hospital, Tulsa, Oklahoma, during the past five years, 16 cases were found in which there was involvement of the fundus and their age varied from 44 to 77 years. There is no evidence to show that gestation has any relation to the development of carcinoma. Statistics support the view that the cases are about equally divided between the

nulligravidas and multigravidas. However, that group of women who continue to menstruate up to the age of 50 and 55 are usually designated as having a late menopause. Crossen and Hobbs in reporting their series, found that the incidence of carcinoma of the late menopause group was four times more frequent. Therefore, any woman who menstruates beyond the age of 50, should be closely observed because continuation of the menstrual function into the period when the endometrium should be inactive indicates a tendency to erratic epithelial activity and she should be regarded as a potential candidate for the development of a carcinoma of the fundus. Those cases of hyperplasia of the endometrium occurring late in life, should be viewed with suspicion. Ewing states that most observers have failed to find a transformation from simple hypertrophied gland-cells to the neoplastic. However, there have been cases reported by most all of the writers where the patient was diagnosed hypertrophic endometritis on the uterine scrapings and within a year or sometimes less developed a carcinoma of the endometrium. In Morrin's report from the Barnard Free Skin and Cancer Hospital in St. Louis, he states that four of their patients developed adenocarcinoma who had had previous curettage with a histological diagnosis of endometrial hyperplasia. Payne found the frequency of association of hyperplasia with carcinoma after the menopause to be 5.8 times that before the menopause. Leiomyoma are frequently found in association with carcinoma of the fundus. Stacy reports an incidence of 33.4 percent in a series of 269 operative cases. Healey states that the association is a significant one and mentions increased irritation and stasis as a possible etiological factor when there is a predisposition to carcinoma. It has been advocated that malignancy be excluded by careful curettage in every case of myoma associated with irregular bleeding, irrespective as to whether it be premenopausal or postmenopausal. It is further suggested that it is im-

*Presented before the Surgery Section of the Oklahoma State Medical Association at the Annual Meeting, May 2, 1946.

portant that the surgeon who performs a supravaginal hysterectomy for fibroids should inspect the interior of the fundus immediately upon removal so that the complete operation can be performed if cancer is found.

SYMPTOMS

The predominant symptoms in this group of cases is menorrhagia and metrorrhagia. The menorrhagia occurring in that group who have not reached the menopause. The metrorrhagia occurring in the older group. However, oftentimes before there is any evidence of blood, these patients usually have a discharge which may be only a clear mucoid like substance of occasionally a purulent material which is indicative of infection so frequently associated with these cases; namely, pyometritis. This discharge later takes on a brownish color and persists for some time before the presence of blood is noted. The duration of these symptoms may continue over a period of several months and the discharge may be so slight that no anxiety is created in the mind of the patient. These patients frequently say that they thought that these things were to be expected, since they were going through the menopause. The younger patients may have bleeding between their normal periods or may have prolonged and profuse menstrual periods. Since hormones seem to be in vogue at the present time, many of these cases receive treatment over a period of several weeks before serious thought is given to the presence of a malignancy. Pain may be present in some of these cases but like cancer elsewhere in the body, it usually occurs later and when it does occur it usually means that the disease is in the advanced stage. Uterine cramps may sometimes be present especially if there is associated a pyometritis and retained uterine secretions.

DIAGNOSIS

The symptoms and clinical findings are usually not sufficient to establish and confirm the diagnosis of malignancy. The advantage of a diagnostic curettage far outweighs its potentialities for harm. Therefore, any patient who presents herself with a history of irregular bleeding, sometimes referred to as "spotting," especially if past the menopause should be curetted. Likewise, a patient past 35 years of age or even 40 with irregular bleeding or a prolonged menstrual period of undetermined origin should receive the same careful attention. It is my opinion that this curettage should be carried out under general anesthesia in order that the uterus may

be explored and satisfactory scrapings obtained. It is very important that we supply the pathologist with sufficient material for a careful study. The idea of obtaining a small amount of material by suction or other methods is oftentimes disappointing and the proper diagnosis may not be established. Surgeons and gynecologists are urged to carry out this procedure at the very earliest possible date. Statistics show that the patients themselves waste many precious months. The successful treatment of carcinoma of the fundus, like carcinoma involving any other part of the body depends on an early and correct diagnosis.

CLASSIFICATION

Many gynecologists attempt to classify these cases both clinically and histologically. Heyman divides the patients into the clinically operable, technically operable, clinically inoperable and technically inoperable. Crossen divides them into six definite groups. Group I. Those limited to the endometrium. Group II. Those involving the endometrium and a portion of the musculature. Group III. Those involving the endometrium and all of the muscle out to the mucosa. Group IV. Those involving all of the endometrium, muscle and a portion of the mucosa. Group V. Those involving all of the uterine wall and some of the adjacent structures, for example, the bladder or a portion of the bowel. Group VI. This group involves essentially everything in the pelvis and naturally is the advanced group.

When classified histologically according to Healey in the first group we have (1) papillary adenoma malignum; (2) adenoma malignum; (3) adenocarcinoma; (4) solid cellular adenocarcinoma; (5) adenocanthoma; (6) epidermoid carcinoma. All except the last group represent some histological variety of glandular cancer. The proportion of recognizable glandular tissue is greatest in the first two and least in the fourth group. The degree of malignancy is least in the first two groups and greatest in the fourth group. The adenocanthoma variety represents a mixture of glandular and squamous tissue and varies considerably in its malignant qualities. Rarely a case occurs in which the histological structure of the tumor is that of squamous epidermoid cancer despite its limitation to the corpus. The prognosis in such patients is poor regardless of the method of treatment. It would seem best, however, to avoid operation and to depend upon irradiation. There are several factors which must be taken into consideration in

determining the prognosis but most important is a knowledge of both the histological and the clinical classification.

MANAGEMENT

Because of the successful use of radiation therapy in cancer of the cervix and in the control of uterine bleeding from fibromyomas and other non-malignant conditions, it was quite natural that intra-uterine applications of radium should be considered and tried in the inoperable cancers of the corpus. Radiation therapy has had to overcome much opposition in establishing itself as an efficient and dependable form of treatment for cancer of the corpus. This opposition was based, largely, on the fact that cancer of the corpus histologically belongs in the group of adenocarcinomas which were said to be radioreistant. Moreover, surgeons believed that hysterectomy for the operable cancers would probably cure the patients of their disease, and for a long time many prominent radiation therapists were not convinced of its value in the treatment of adenocarcinoma or so-called glandular cancer. French radiologists in particular dismissed the subject with the brief but positive statement that adenocarcinoma of the body of the uterus is not radiosensitive and all such patients should be treated surgically if possible. Until comparatively recent years, this dictum has been widely accepted and the advice followed to a great extent; that it was an erroneous opinion has now been definitely demonstrated by many investigators. In view of the present knowledge of cancer of the body of the uterus, it is evident that each patient presents an individual problem. No rational form of therapy can be instituted until an accurate diagnosis is obtained and this is usually accomplished only by a careful curettage. Consequently proper evaluation of the curettage is of equal importance with the indication for the procedure and the graduation of the tissue is of more positive value with regard to treatment and prognosis than is the case with a biopsy of the cervix.

I have adopted the plan of having radium available and immediately following the curettage, the uterine cavity is filled with several small capsules which usually contain 10 milligrams of radium. Oftentimes, four to six such capsules are inserted; each of course is properly screened. The pathologist is requested to submit his report sometime during the next 24 hours. If no malignancy is encountered the radium is left in the uterus only until a suitable dosage for a benign

condition, such as metropathia haemorrhagica, is employed. However, if a carcinoma is found, then a much larger dose is given varying from 4000 to 5000 milligram hours. At this time a decision must be made as to future treatment, particularly as to whether the case is operable or inoperable. Many factors enter into the picture and must be considered before a definite decision is made because of the modern concept that the proper treatment of carcinoma of the fundus is a combination of radiation and surgery. While removal of the diseased uterus is always desirable if at all feasible, it is uniformly recognized as mentioned before that the vast majority fall into the older age group and are often substandard surgical risks because of their age, cardio vascular disease, renal impairment, diabetes, etc.

In addition to the general physical condition of the patient, the local situation must be carefully surveyed to determine the mobility of the uterus and extent of the disease. If the uterus is mobile and the patient seems to be a fair surgical risk, then she is considered operable; so she receives a dose of about 4000 milligram hours of radium and after a period of five or six weeks a panhysterectomy and a bilateral salpingo-oophorectomy is performed. It is not within the scope of this paper to describe the technique of the operation more than to add a word of caution against squeezing out malignant implants from the uterus either through the cervix or fallopian tubes. This is prevented by closing the cervix prior to making the abdominal incision. After the abdomen is opened the tubes are grasped with a hemostat at the outer ends; this will assist in preventing the spread of cancer cells through the tubes. A careful examination of the adjacent structures is made during the operation and if there is any evidence of metastasis or encroachment of the disease on the neighboring tissues which cannot be removed at that time, a course of deep x-ray therapy is given postoperatively. However, if the process is limited to the uterus, and the histological findings fall into Group I or Group II, then we can be reasonably sure of a cure in that patient. While we do not presume that the preoperative radiation by radium will eradicate the disease, we do feel that it devitalizes the growth, prevents its dissemination and lessens the chances of local recurrence, if and when surgical removal can be effected. It is true that irradiation alone may effect a cure in a considerable number of these cases of the more undifferentiated type. However,

it is my feeling that we are not justified in dispensing with the combination of surgery and irradiation in operable cases, whether differentiated or undifferentiated. While one-third of the cases presenting themselves for treatment are inoperable, certainly irradiation by intra-uterine radium and x-ray externally offers much to this group. Even if there is no chance of cure, the palliation given more than justifies its use. These patients can be relieved of much of the pain and the infection, and oftentimes many months or years will be added to their life. On the other hand, gratifying five year survivals have been reported by Friske, Bowing and other workers.

SUMMARY AND CONCLUSIONS

(1) Carcinoma of the fundus of the uterus is largely a postmenopausal disease; however, it must not be forgotten that it may occur even before the climacteric. (2) Statistics show that women who present evidence of ovarian activity after 50, are more inclined to develop cancer of the fundus. Therefore, intermittent bleeding occurring in this group should be viewed with suspicion. (3) Successful management depends on early diagnosis which can only be accomplished by a careful curettage and pathological study of the tissue obtained. (4) Treatment consists of a combination of pre-operative irradiation and surgery in the operable group. In the inoperable cases treatment consists of irradiation by radium and x-ray. (5) When preceded by irradiation preferably radium, panhysterectomy

with removal of the adnexa offers a five year survival, ranging from 55 to 75 percent of the operable cases. Since operation is contraindicated by old age, medical infirmities, extensive disease and technical difficulties in one-quarter to one-half the cases seen, the cures by irradiation in these unfavorable cases are bound to be fewer; but, in spite of this about half of the total number of patients should survive five years or longer if the proper selected therapy is instituted. These results can be vastly improved by more widespread adoption of the well-known measures for prophylaxis, early diagnosis and treatment.

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CORRECTION

Through error, several names that should have appeared on the list of honorary and life members in the April Journal were left out. The complete, corrected list follows:

Honorary Members

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SMALL BOWEL OBSTRUCTION*

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When an occlusion to the small intestine occurs, there results a series of pathologic, physiologic and chemical changes in the body which have a definite bearing on the sequence of symptoms and signs. Confusion in discussion can be avoided if we remember the distinction between the (1) simple occlusion, (2) the occlusion due to rapid strangulation and (3) the combination of these two abnormal states.

By obstruction of the small intestine I refer to an occlusion either inside the lumen or by pressure from the outside, so that the normal physiological mechanism for passing along the contents of the bowel is prevented from functioning. In its early stage, such an obstruction does not imply damage to the blood supply or tissues comprising the small intestines. It may be either an acute obstruction when the change is brought about suddenly or a chronic obstruction when the picture develops slowly over a long period of time. It may be partial or complete. Strangulation, on the other hand, means the shutting off of the blood supply with resultant rapid necrosis of the tissues of the involved area.

In the late stages of intestinal obstruction there is always a possibility of strangulation, either from over-distention with fluid or air or by an actual twisting of the heavy soggy loop, causing a sharp kink at some point in the mesentery. The obstructions often combine the features of both obstruction and strangulation. The mechanism causing iliac obstruction may be due to one or more causes:

- (A) Anomalies
 - 1. Hypertrophic pyloric stenosis
 - 2. Atresias
 - 3. Peritoneal abnormalities
- (B) Bands
 - 1. Hernias, either external, internal or post-operative
 - 2. Adhesion, post-inflammatory
- (C) Twists
 - 1. Volvulus
- (D) Blocks to lumen
 - 1. Mechanical
 - (a) Food, gall stones, intussusception

2. Pathological, tuberculosis, diverticulitis or cancer

(E) Blocks by pressure from other external causes

- 1. Inflammation, i.e., pelvic abscess
- 2. Tumors

(F) Ileus (paralytic)

- 1. Traumatic
- 2. Post-operative
- 3. Post-infectious
- 4. Embolic
- 5. Vascular spasm

Of these causes of small bowel obstruction, external hernia is the most common. In most cases it is an incidental finding in an incarcerated hernia, which is to be explored as an emergency but in a few it is found only after careful search in patients coming with advanced obstruction without obvious cause. The next common one of this group is the obstruction due to simple adhesions resulting from previous surgery or inflammation. Obstruction results from the kinking brought about by degrees of gaseous distention which would be of no consequence in the absence of the adhesions. Of course there are the adhesive bands which are the result of previous surgery or inflammation with the exception of a few congenital ones, such as the band sometimes associated with Meckel's diverticulum. Intussusception accounts for a small fraction of the cases seen. However, it is dependent upon the type of practice encountered. Mesenteric venous occlusion is seen quite frequently and the obstruction results simply from a loss of motility. Other mechanisms, such as congenital atresias, volvulus, primary neoplasms and internal hernias, are rather rare. Consideration of these various causes is of importance in the management of the obstruction. In treating intestinal obstructions, conservative management can only be advised in those cases in which it is known that there is no loss of bowel viability. It is successful only in cases due to simple adhesions and in rare cases due to neoplasm. No other group can be successfully handled without surgical intervention.

SYMPTOMS AND SIGNS OF SIMPLE OBSTRUCTION

The first evidence is pain of an intermittent, colicky type caused by bowel contrac-

*Presented before the Surgery Section of the Oklahoma State Medical Association at the Annual Meeting, May 15, 1947.

tions, initiated to project the bowel contents beyond the obstruction. When this fails, nausea and vomiting develops. Distention of the abdomen usually follows closely with audible borborygmus. The pain and audible peristalsis will persist until the bowel becomes over-distended and paralysis develops.

As time passes, vomiting increases, at first relatively clear, later bile stained and finally dark brown in color with an odor suggesting regurgitated feces. The general appearance of the patient changes. Dehydration becomes marked as indicated by dry tongue and a "drawn" or "pinched" expression of the face and a quickened pulse. In advanced cases cyanosis of the lips and fingernails may be detected.

As this patient's bowel continues to be obstructed, several chemical changes occur in the body. The higher the obstruction in the small intestine the more rapid disturbances of water and chemical balance develop and the more important these changes become in the estimation of the morbidity and the treatment.

There is a loss of the blood chlorides because of the vomiting. There is an increase in the non-protein nitrogen and carbon dioxide combining power. The latter laboratory procedures cannot be depended upon as an aid in early diagnosis but are used rather as a guide in the progress of the disease and an indication for supportive treatment.

The degree of clinical distention depends primarily on the level of the obstruction, the high one causing little distention because only a short segment of the intestine is involved.

After the age of five, gas is not normally seen in the small bowel because it is kept churned into small bubbles by the activity of the bowel. With obstruction, gas collects in quantity and renders x-ray visualization of distended loops possible. There is usually a ladder-like arrangement of the loops. In complete obstructions of more than a few hours duration, gas is not ordinarily seen in the large bowel. Fluid levels are usually visualized but not always decisive.

The patient is unable to pass gas and feces following a complete obstruction within a day and the enema gives only a return of the injected fluid. By sitting at the bedside, loops of intestine can be observed and felt in the average abdomen.

The symptoms and signs of a strangulation obstruction are more dramatic. There is a "strangulation" of the blood supply to

the involved loop of bowels. After strangulation has been in force from three to four hours, loss of viability occurs. Strangulation is prone to occur in obstructions due to hernia, intussusception, adhesive bands, foreign bodies in the lumen, mesenteric thrombosis and volvulus. The symptoms and signs of strangulation are merely added to the symptoms and signs of a simple obstruction. There is sudden onset. The patient frequently complains of back pain because of an apparent tension on the mesentery. There is engorgement of the peritoneum causing generalized pains and as the pathological process continues, fever and leukocytosis indicate an impending gangrene. In case that the strangulation is massive and progressive, the patient frequently has the appearance of shock, with a cold, clammy skin, rapid pulse, and a fall in blood pressure.

The causes of death in an intestinal obstruction may be listed as (1) strangulation, (2) chemical imbalance, (3) prolonged distention. Strangulation usually leads, in untreated cases, to peritonitis and death. In intussusception, the gangrenous segment is inside an ensheathing cylinder of gut and peritonitis may not occur. Strangulation may kill by virtue of shock.

The chemical imbalance is a problem only in high obstruction. Here there is a loss of salt, the hydrochloric acid and fluid, which results in hypochloremia, uremia and alkalosis. These changes alone, if untreated, will probably be fatal.

Prolonged distention of segments of the gut leads to thrombosis of small vessels in the wall and secondary loss of normal semipermeability of the mucosa with consequent transperitoneal absorption of toxins from the lumen in quantities sufficient to kill.

Much difficulty is often experienced in differentiating between true mechanical occlusion and adynamic or inhibition ileus. An accurate history of the pain, the infection, and the character of the onset of abdominal distention will aid in the differentiation. The x-ray findings, the increase in the leukocyte count and fever indicate an inflammatory cause but these may be present to a greater or lesser degree in all advanced cases of intestinal obstruction, particularly those associated with bowel strangulation. Abdominal tenderness and rigidity are valuable guides. Simple occlusion rarely causes marked local tenderness. By contrast, strangulation obstruction causes definite tenderness and frequently an indefinite mass corre-

sponding to the strangulated loop of bowel may be felt. If the character of the pain, the roentgenogram and the local abdominal signs indicate that obstruction is present, operation is indicated. It is to be remembered that complete bowel obstruction may be present with infections within the abdomen, particularly localized infection or abscess.

OUTLINE OF TREATMENT

In approaching the treatment of an obstructive lesion, of course the thing of greatest importance is a correct diagnosis. The earlier the treatment can be started the better results can be expected.

Acute cases usually require considerable amounts of fluid. There should be an attempt made to decompress the stomach and bowel, after which removal of the cause of obstruction should be done. The time and method of operative procedure must depend upon the type of obstruction and the condition of the patient. If the obstruction is of short duration and the patient has not been seriously dehydrated, operation may be done at once. Other patients suffering from dehydration, hypochloremia, abdominal distention and rapid pulse, should always receive preliminary treatment with sodium chloride, and gastric and duodenal suction, before operation. This greatly lessens the operative risk. Many of these patients show slight improvement but this should not give any false sense of security. If there was an obstruction there, it should be explored and the obstruction removed.

When strangulation of the gut is suspected, early operation is imperative to avoid the toxic effects of necrosis and the danger of peritonitis as a result of rupture. Many of these cases will require massive and almost formidable surgery. If the obstruction is due to some adhesive band, which may be released and the color reappears, the surgeon can be positive that the blood supply is adequate. However, if irreparable necrosis has resulted, the extent of the operation must depend upon the patient's general condition. Frequently it is much safer to exteriorize the necrotic segments and remove it after closing the abdominal wall, leaving the open ends of the gut protruding, to be closed at a later date by an anastomosis or by the Mickulicz technique. Operative procedures upon the acutely distended gut are always dangerous. In a patient acutely ill with obstruction, resection and anastomosis not only consumes valuable time but the danger of peritonitis is great. Leakage from the distended gut of

the intestinal obstruction usually means disaster.

Enterostomy, as treatment in intestinal obstruction, is a surgical necessity and not one of choice. It has been shown by Ochsner and Storck that stripping of the bowel to remove its contents is of doubtful value. This merely adds to the danger of infection and shock. When the bowel is not over-distended and peristalsis is still active, it is not necessary. An enterostomy tube, properly placed after the manner of Witzel or one of its modifications, is a life-saving procedure. It not only gives comfort to the patient but it prevents distention and will drain off the material which has accumulated in the distended loops of bowel. The enterostomy tube will protect the damaged gut wall and suture line. The danger of an enterostomy may be reduced to a minimum by isolating a segment of bowel with intestinal clamps and by aspirating all gas and liquid contents before placing the sutures and introducing the tube. It is possible to make a serious error that will lead to a fatality if an enterostomy, alone, is done on an obstruction due to a strangulated section of bowel. When an abdomen is opened and the fluid is found to be bloody, the surgeon should definitely assure himself that no strangulation of a gut is present before enterostomy is done. Enterostomy will not successfully drain the bowel if it is paralyzed. Peristalsis must be present to force the liquid and gas content of a gut through the enterostomy tube. The logical place for any intestinal drainage by enterostomy is just proximal to the point of obstruction. In cases of high obstruction a jejunostomy is not an efficient procedure. It has been shown that decompression methods, as emphasized by Wangenstein, are far more efficient in emptying the stomach and the upper intestines. It is important that after the 16 or 18 French rubber catheter is placed in the gut it should be passed through a loop of omentum and when possible the omentum fixed to the suture line for added protection against infection and adhesions.

The Witzel type of catheter enterostomy creates a serosal lined tunnel which the catheter transverses for several centimeters before entering the lumen. By virtue of this, the fistula closes very quickly after the catheter has been removed.

Idiopathic intussusception usually occurs in infants under two years of age and more frequently in boys. It is characterized by the sudden onset in healthy children, the appearance of blood and mucus in the stool, an

abdominal mass in most cases, vomiting and apparent complete well-being between the cramp-like pains. It is treacherous in that the second 24 hours usually finds the patient much improved, even though the intussusception persists, a fact which may lull both physician and family into fatal delay.

In the first few hours it has been found safe to reduce intussusceptions under the fluoroscope by barium enema. After 12 to 15 hours this seems unwise because the observation period after such reduction may be symptom free in spite of progressive gangrene of intussusception.

After the first few hours it is safest to reduce the intussusception under general anesthesia. Usually gentle compression of the mass through the wall of the edematous bowel and application of warm, moist packs eliminate enough of the edema that reduction of intussusception is possible. In some cases, however, it is not possible to reduce the process, either because the bowel begins to split, due to progressive stretching or because gangrene of the intussusception is demonstrable, either before or after reduction. These types of cases are usually confined to the iliac portion of the process and it is practically always impossible to milk the apex out of the cecum.

In cases in which gangrene is present or suspected or in which tears of the wall appear in attempts to reduce, resection and anastomosis is the proper plan of management.

External hernia with strangulation usually appears with a sudden onset and requires immediate treatment. In the hernias in which incarceration and obstruction are less than five or six hours duration and in which no signs of strangulation have appeared, the sac may be boldly opened and repair accomplished as in elective hernioplasty. In cases of longer duration presenting signs of strangulation, especially in femoral hernias, incision must be made cautiously over the sac. If there is question as to the safety of opening the sac, it is much better to open the ring which is causing the constriction and then proceed. If gangrene is present and resection is necessary, the gangrenous portion can be removed en masse without soiling the tissues of the field. Oblique, aseptic, end to end anastomosis is followed by unhampered repair of the hernia.

CASE REPORT NO. 1

Mr. W.M.H., age 75, was admitted to the hospital because of abdominal pain, fever and vomiting which had been present for five days. The onset followed a colonic irri-

gation. When first seen his abdomen was markedly distended; his face was flushed and his skin was cold, moist and clammy. The blood pressure was 165/100 and there was a slight irregularity in the rhythm with a systolic murmur present.

A mass in the right lower quadrant was palpated. The point of maximum tenderness was in the right lower quadrant. The temperature was 101°, pulse rate 100 and respiratory rate 22. The urinalysis showed four plus albumen, white blood count 22,800 with 97 percent polys, 44 percent being of stab form.

A flat plate of the abdomen showed numerous distended small loops of bowel.

A mesenteric thrombosis of the blood supply to the terminal 10 feet four inches of the ileum, cecum and a portion of the ascending colon was present. This portion was black in color and greatly distended.

A massive resection was done and the gangrenous portion exteriorized. Clamps were placed on the viable level and the necrotic portion removed.

Normal convalescence with adequate amounts of amino acids, whole blood transfusions and fluids made is possible to perform entero-colostomy on the tenth post-operative day. Twelve days later the ends of the bowel were inverted and all stools passed through normal channels. Patient was discharged from the hospital 26 days after admission.

CASE REPORT NO. 2

D.J., a two-year-old male child became ill 24 hours before admission to the hospital with acute generalized abdominal pains. Vomiting ensued. A physical examination revealed normal temperature with a painful abdomen. He was difficult to examine because of constant crying and straining whenever a doctor approached the bedside. His respiratory rate was very rapid, pulse 120, heart and lungs were normal. The abdomen was distended and tender in right lower quadrant. The white blood count was 25,400 with high polymorphonuclear leukocytes. The chest x-ray was negative.

Decompression by a Levine tube, large doses of penicillin every three hours, fluids subcutaneously and sedation constituted the elected treatment. The distention of the abdomen became worse for several days in spite of the decompression tube. On the eighth day the temperature receded to normal and the abdomen was flat. He passed some flatus and had a normal bowel movement. The Levine tube was removed and liquids

were given by mouth. Two days later vomiting recurred and a complete obstruction developed. All of the clinical findings in an acute obstruction were present.

At operation, the distended small bowel seemed to fill the abdomen. The collapsed distal portion was 10 inches from the ileocecal junction where a fibrous, inflammatory adhesive band had fastened it at this point. The adhesions and bands were freed carefully but during the process several holes were torn in the dilated portion of the bowel. A resection of this portion of the bowel with side to side anastomosis and a Witzel enterostomy was done. The post-operative treatment followed recognized principles using decompression, fluids and sedation. He was discharged 28 days after admission.

In this case the appendix was not visualized but was no doubt the seat of all the trouble and precipitated this intra-abdominal inflammatory process.

SUMMARY

It is emphasized again, in conclusion, that there is no substitute for early operation when the intestine is mechanically obstructed. Inflammatory obstruction due to paralysis or recent adhesion between loops of bowel, may spontaneously release themselves with control of distention and other supportive treatments.

Massive resections in strangulated, obstructed bowels are hazardous yet may be tolerated providing a minimal amount of trauma is practiced. The procedure of choice is the briefest operation which will be a life-saving measure.

When a very early diagnosis of obstruction is made and obstruction successfully relieved by operation, much of the treatment

outlined above may be unnecessary. In the very late cases, all treatment may be of no avail. In any surgical practice there are sure to be all types of obstructive lesions and the treatment for each must be individualized. A knowledge of the pathology, changed physiology and body chemistry are essential for logical therapy.

Two case reports illustrating two common types of obstructive lesions and the treatment given are reported.

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MEET OUR CONTRIBUTORS

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SURGERY OF THE CERVIX WITH THE ELECTRIC KNIFE

J. E. WALLACE, M.D.

TULSA, OKLAHOMA

I wish to state that the electric scalpel (or electric knife), is not a knife nor a cautery, but just an electric applicator.

The day was when a physician who used electricity was considered a faker, but today if he does not use it, he is considered a fogie.

Electro surgery, like every other innovation, has passed through a period during which its overenthusiastic, but often misinformed advocates, caused many practitioners to doubt its efficacy. With more careful observation and earnest and persistent investigation, the possibilities are becoming more appreciated, while the indications and contraindications for its use are better understood. Particularly is this true in its surgical application to gynecological disorders, the subject of this presentation.

Dr. Howard Kelly says that electro-surgery is par excellence, a knife and fork procedure. To those who have learned its technique and its possibilities, in its proper special fields, it is as far superior to our most ancient and honorable scalpel surgery and it is as far ahead as the electric tramway is ahead of the lumbering horse cars of our youthful days.

It is indeed a curious reflection that after milleniums of scalpel surgery, with its attendant ligating, needling, and suturing, in this age, so ancient a craft as ours should be called upon, like Benjamin Franklin, to snatch the power from the lightning which flashes in the heavens, with which to attack our worst enemy—cancer.

In presenting this paper, I do not intend to review the voluminous literature, past or present, or discuss the relative merits of the numerous methods of treatment advocated and practiced for the relief of endocervicitis, conceded to be the most prevalent of all gynecological disorders.

Since all readers are not gynecologists, a brief resume of the anatomy, histology and pathology of the cervix necessarily precedes the presentation of the subject matter proper, in order that the rational of the treatment may be better understood. Only by a thorough study of the normal cervix and

structural changes in the diseased endocervix can the efficiency of any method of treatment be judged.

The distal portion of the cervix or external os is approximately five millimeters in its transverse diameter. Following pregnancy, instrumentation, infection, trauma, or disease, the os may be distorted or enlarged. The size can vary from a minimum, slightly larger than normal, to a maximum, when the circumference of the os coincides with the diameter of the cervix at its lower end. The internal os is circular, about one millimeter in diameter and rarely changes its definite shape.

The cervical canal, about one inch in length, lies between the internal and external os. It is fusiform or spindle shaped, its widest diameter nearly on a level with the posterior fornix and the narrowest portion of the internal os. So far as we know, it acts only as a passageway between the uterus and the vagina. The canal is lined by mucous membrane which is almost one millimeter in thickness and presents a longitudinal ridge of its anterior and posterior surfaces from which a large number of folds or rugae branch off obliquely and laterally, connecting these two ridges. Due to the numerous folds and plications this relatively small surface is increased in actual area presenting an extensive surface to infection.

The epithelium at the isthmus is of the low columnar or cuboidal variety, some nuclei, being near the upper portion of the cell, others either at the center or the base. Advancing toward the external os, this epithelium becomes of the high columnar, ciliated variety, about 40 by four microns in size, with a constant basement nucleus.

Columnar epithelium lining the canal is gathered up into minute folds, forming a sort of rugae that is studded with 60-80 thousand compound racemose glands, horizontally situated with slight upward trend of the ducts, that evince a marked susceptibility to bacterial invasion.

At or about the junction of the middle and lower third of the cervical canal, a change takes place in the epithelium, the simple

columnar gradually undergoing transition to the stratified variety. There is a definite basement membrane below the entire epithelium.

Scattered throughout the mucous membrane are many simple tubular glands, about one to two millimeters long, similar to those found in the uterus, but the racemose variety predominate. The ducts open into the cervical canal. The gland usually stops at the basement membrane though some extend beyond this structure, the depth from the surface being about three millimeters. Approaching the internal os, the glands become fewer and more shallow, and it is conceded that infection rarely, if ever, originates at this particular location.

A most important factor in dissemination of infection is its rich lymphatic system that ramifies every part of the corpus and adjacent structures before terminating in large collecting trunks that traverses the uterosacral and broad ligaments. Classical differentiation of pathological changes is not so important, if we bear in mind that the beginning is always in the endocervical tissue. It is estimated that 80 percent of all multiparous women, and some 20 percent of virgins and nulliparous females, are affected with this malady. Accumulated statistical data indicates that 80 percent of pelvic malignancies may be charged to improperly treated cervical diseases.

Furthermore, 90 percent of cancer arise in a squamous epithelium covering of the portio, in or near the external os, easily accessible, and highly responsive to therapy. Is it unreasonable therefore, to assume credit for thermal destruction of many cervical epitheliomas, in their incipency as is accomplished in other epithelial locations?

I think it generally conceded there is always traumatic damage to the cervix in parturition that may be amendable to self restitution, but more often necessitates therapeutic measures assigned to restore cervical parity. Experience teaches us that most of these injuries, if left to the favor of fortune, will ultimately confront us with a chronically infected organ, that may have a far reaching influence on the health of the possessor. As many of these conditions do not present symptoms at the place of infection, so it is important that the cervix be visualized, as palpitation alone is often misleading, although it is an essential part of an examination.

A preponderance of cases consulting the

gynecologist are of long duration that have been neglected or inadequately treated. Too often having been subjected to ill advised laparotomy, in spite of gross cervical pathology that might have accounted for the pelvic symptoms. Rarely is the need for exploration so pressing, it could not await conservative treatment of the cervix. It is my impression that more than half the indications for radical treatment could be obviated with proper electrical therapy.

One has only to recall lymphatic extension of tonsil infection and modes of cure to appreciate the same phenomenon in infected cervixes.

The cervical glands are racemose, similar to the tonsils, yet a number of surgeons will remove the uterus and leave the infected cervical glands insitu. If the same man was to remove the muscles of the throat, and leave the infected tonsil, the throat men would want his license revoked, yet, they can remove a myocitis of the uterus and leave the site of the infection intact, and there is nothing said about it, although the woman becomes a chronic invalid afterwards.

I sometimes think that Dr. Charles Mayo was not joking when he said, "The reason that there are so many operations done on the female organs is that the doctors know that the field of operation would not be exposed to a jury."

The above condition is purely a myocitis extending through the lymphatics from the racemose glands to either the uterus or throat.

Medical men have laid great stress upon the fact that both the tonsils and teeth are important sources of infection and insist upon their removal where indicated. The cervix as a focus has not received the same amount of careful attention, and its treatment in many cases has been restricted to the mere swabbing of some impotent chemical or vaginal douching for an objectional leucorrheal discharge.

The casual relationship between the cervical focal infection and the secondary lesions have been proved spectacularly at the Mayo clinic by injecting cultures from infected cervix into the vein of rabbits. The seriousness of endocervicitis therefore, can hardly be overestimated, and treatment should be instituted immediately upon its detection.

I find quite often that the columnar epithelium of the cervix has extended down over the stratified squamous epithelium and be-

come irritated in a great number of young girls who have never been molested in any way and on account of this irritation, they become very nervous, and by following a belief that a young girl should not have a vaginal examination, the cause of their nervousness most often is not diagnosed.

In those coming to me seeking relief, after a hysterectomy, there is usually a history of a sense of weight or dropping down of the pelvic structures and perineum, leucorrheal discharge, backache that may extend down the thighs, dyspareunia, bladder and rectal discomfort, occasionally remote neuritic and rheumatic pains and finally nervous invalidism. This remarkable chain of symptoms is produced largely by lymphatic extension of infection, lymphangiitis and lymphadenitis, that may involve any part or all of the pelvic lymphatic system.

From the above you can readily see why the woman who has had her uterus, tubes and even ovaries removed, does not get well.

There is a difference of opinion as to whether bacterial infection spreads by continuity or by the lymphatics. Regardless of the manner in which this takes place, it is a fact that primary infection of the cervix ascends into the uterus, fallopian tubes, ovaries, and parametrial tissues.

The extent and rugosity of the cervical mucosa affords innumerable recesses for pathogenic organisms, while the traumatized and lacerated cervix is an open door to infection. The mucosa of the cervix becomes swollen, oedematous, and often everted with a loss of its cilia, while the mucosa of the portio about the external os presents a circumscribed area of glandular proliferation. The earliest stage of cervical infection represented by an infiltrated area denuded of squamous epithelium, the result of necrosis and maceration of the surface layer, a true erosion but rarely seen at this stage.

The columnar epithelium under constant irritation of infection, pushes itself out on to the vaginal aspect of the cervical rim, replacing the stratified epithelium, producing the so-called, "erosion," classified as simple, if the surface is smooth and the glands few in number with no dilatation; follicular, if the glands are numerous and dilated; papillary, if the glands are numerous, running downward, parallel to one another, producing a papillary appearance, due to the numerous stroma papillae which project upward between the glands. The continued congestion produces a hypersecretion

of mucous from the infected glands and ultimately a hypertrophy and hyperplasia of the cervical connective tissue. Sooner or later the crypts of the ducts of these glands become occluded, resulting in subsequent cyst formation commonly known as nabothian cysts. This cystic condition increases the bulk of the already hypertrophied cervix, interfering with normal circulation and muscle contractility.

Reviewing what has gone before, the following facts are obvious:

1. The cervical canal is about one inch long and spindle shaped.
2. Infection is generally of the ascending type.
3. The brunt of infection is borne by the lower portion of the cervical canal.
4. The internal os and surrounding area are rarely, if ever, infected.
5. The glands are always infected.
6. The crypts and rugae of the cervical mucous membrane are excellent hiding places for pathogenic organisms.
7. Nabothian cysts result from occlusion of the gland ducts or from pressure.
8. The lining membrane of the cervical canal is one or two millimeters in thickness and has no submucosa, the glands reaching to the basement membrane.
9. Some of the glands extend beyond the basement membrane into the stroma of the cervix.
10. Simple tubular and racemose glands are found, but the latter predominate.
11. The anatomical arrangement of the mucous membrane increases materially the surface area of the canal.
12. The main cervical arterial supply is near the isthmus, thus far removed from the diseased mucous membrane.

Having briefly reviewed the anatomy and histology of the cervix and the pathology of endocervicitis, we come to a consideration of nature's healing process and the possibility of expediting it by treatment of the diseased area. With a clear understanding of how the reparative process progresses, the appropriate treatment suggests itself, thus assuring the patient a more rapid recovery, with a minimum impairment of cervical function, so important in subsequent parturition.

As the inflammation subsides, squamous epithelium proliferates from the sides or

regenerates from scattered islets still remaining beneath the columnar epithelium, enters the neck of the glands and in some cases succeeds in entirely replacing the columnar variety normally lining these glands, filling them with a solid squamous plug or nabothian cysts result.

It is therefore evident that the natural healing process produces the replacement of the columnar epithelium of the cervix by stratified squamous epithelium, which completely fills and obliterates them. These findings are the result of microscopic study of sections removed from healed cervixes, three and six months after conization.

The healed cervix differs from the normal in the squamous epithelium has replaced the columnar type and the racemose glands have been filled and obliterated by the inroads of the same variety. Thus, nature cures by mechanical obliteration, and any therapeutic procedure capable of producing the same effects is in accordance with the natural curative alterations.

It is conceded that when any of the various popular methods of treatment, short of complete endocervical removal fails to cure or relieve, a radical tracheloplasty becomes the method of choice, because it completely removes the diseased mucosa with its deeply infected glands. It is attained by a minimum amount of trauma to, and destruction of, the underlying muscular fibers.

If it can be admitted that the obvious method of treating disease tissue is its removal in its entirety, assuming that such an excision is not inimical to life or future vital function, it logically follows that any such tissue, whether in the cervix or elsewhere, should be removed.

Conization is not based on theory or speculation. It is sound in principle and is based firmly on a foundation of demonstrated facts in the anatomy, histology, and pathology of the cervix. The natural process of healing is not interfered with; on the contrary, it is aided and furthered. While nature attempts to cure by sealing up or obliterating the diseased glands, they still remain insitu, whereas, conization removes not only the diseased glands, in the mucous membrane lining, but also the tissue in which they are embedded, thereby promoting lymphatic drainage, so important for complete cure. The relining of the cervical canal proceeds rapidly and eventuates in a cervix with intact anatomical structure and a canal lined

by squamous instead of the original columnar epithelium.

Conization has for its object the eradication and destruction of the diseased endocervical mucous membrane with its contained glandular structures, and this is accomplished with the preservation of the underlying muscle as well as the uninvolved tissues.

For light work, local anesthesia works nicely, but for deep nabothian cysts, amputations, or any operation that takes any of the muscles, I prefer a general anesthetic.

Contra-indications are: pregnancy, acute cervical infection, acute or subacute tubal involvement.

TECHNIC

1. The patient is placed in the lithotomy position, with legs well separated, and draped in the usual manner.

2. The operator seats himself comfortably before the patient.

3. The vaginal speculum is inserted to expose the cervix.

4. The vagina and cervix are freed of all discharge by swabbing with duterra or hydrogen peroxide and wiped dry. It is important that the cervical canal be free of all discharge.

5. For local anesthesia, an applicator saturated with 35 percent solution of cocaine is introduced into the cervical canal from five to 10 minutes.

6. The inactive, wet metal electrode about six by six inches in size, connected to the high frequency machine through a conducting wire, is placed on the abdomen and held firmly in place by means of a strap or sand bag; the patient is directed to make firm compression with both hands, so as to distract her attention.

7. The depth of the cervical canal is measured and the depth of the instrument is noted.

8. The current is turned on until a stage is reached which will provide sufficient current for the operation.

9. The instrument is held firmly in the hand. The other hand steadies the instrument.

10. The tip of the instrument is placed about one-eighth inch from the external os and the foot switch closed, thereby, turning on the current. A searing of the tissue should take place.

11. With the current still on, the silicon portion of the instrument is immediately passed into the cervical canal up to the in-

ternal os, and with a rotary motion the mucous membrane is coned out.

12. The foot switch is released and the instrument withdrawn. The mucous membrane with its contained cervical glands will be found adhering to the tungsten wire and the silicon tube, and a few drops of blood may appear in the cervical canal.

13. The instrument may be re-introduced and more tissue removed by repeating the previous steps if you so desire.

14. A light packing of the vagina is all that is needed to control the slight amount of serum which will be exuded.

15. The entire operation should not take more than a few minutes. About the fourth to sixth day a grayish slough will be found filling the cervical canal and it is easily removed with a dressing forceps. On the tenth day the cervical canal will be found smaller in size and granulation tissue can be seen. Between the second and third weeks the cervix approximates its normal size with only several small unhealed areas visible. About the fourth week the eroded areas are completely covered by squamous stratified epithelium and the entire cervix presents a healthy appearance. Vaginal douches are neither advised nor necessary until after the fifth day.

As surgery for cancer of the cervix is generally contraindicated, it is advisable to cut out all diseased tissue possible before applying radium.

Patients are instructed to report bi-weekly for a checkup for six or eight weeks, depending on the depth of the operation. A sterile sound should be introduced three or four times especially in amputations or deep operation, to prevent stricture or bridging of the canal. Or, if you prefer, a properly fitted Bley uterector, saves having to have the patient return to the office so often for inspection, and you get a mucous lining running up between the spirals, while you are creating good drainage; after it is removed, the mucous lining unites and gives you a perfectly shaped canal. This should be removed about six or eight weeks after the operation.

Complete amputation of the cervix should be done before applying radium. Any operation from radical amputation to a simple removal of the cervical glands can be done with perfect safety, and no misplacement of cancer cells. And the beauty of it is, that it is easier to do than with the knife or scissors. There are not any stitches to take

in any of the operations except in the repair of lacerations, and the healing time for repair with electric knife is only three or four days longer.

There is no way of comparing the cautery with the electric knife. For with the electric knife you have a very thin elastic scar following, and you know the depth at all times of your cutting, but with the cautery, it is impossible to tell how deep the sloughing will be, and you have a very thick tenacious non-elastic scar tissue following. With the electric knife the cutting is done with a white heat (or lightning) while the cautery is a red or slow heat, followed by a great amount of sloughing.

Strictures of the cervix, from deep cauterization are very hard to eradicate. I don't think a cautery should ever be used in the cervical canal at any time or for any condition.

The use of cauterization is as old as the art of surgery and dates back to early Greek and Roman civilization and even to the time of the ancient Egyptians, and conization of the cervix was first done in 1928. Some will say that cautery does the work, so did the cil light, the greatest light known 100 years ago, but who uses it now? I can see no reason why a woman should not have a clean operation like a man. I know there is no surgeon that would think of letting anyone use a cautery on his prostate and wait to see how deep it was going to slough.

ADVANTAGES

1. The method is used for the treatment of both ambulatory and bed patients.

2. The patient suffers no pain or discomfort, as the nerve ends are severed with lightning, and it takes some time for them to regain their sensitiveness.

3. The symptoms are relieved because the mucous membrane with its contained glands is removed, thus aiding nature in repair and at the same time expediting the healing process.

Healing is more rapid than in an average surgical case left to granulate. The scar is softer and less disfiguring.

4. The danger of subsequent bleeding is practically nil.

5. No muscular tissue is removed, the cervix remaining functionally normal and future parturition is not interfered with mechanically.

6. The technic, easily acquired, can be carried out by the surgeon. The operation, especially in infected areas, is a pleasure.

The cervix need not be drawn down to the vaginal introitus, thus avoiding the possibility of subsequent retrodisplacement of the uterus.

7. The cutting proceeds smoothly, the generated heat assuring asepsis.

Diseased glands are exploded often insitu and caused to absorb. Diseased cells and infections are also destroyed.

8. Tissue can be removed to any desired depth.

9. Conization can be used for removing tissue for the microscopic examination particularly in cases where dilation and trauma are inadvisable, as it does not displace any cancerous cells.

10. The procedure may be repeated as often as is deemed advisable to accomplish its objects.

11. Removal of the diseased tissue promotes and facilitates lymphatic drainage, and is a cure for more cases of sterility.

12. Conization results in a minimum of scar tissue because division of the tissue is accomplished far more accurately than with the finest knife. It is a bloodless, painless and sutureless procedure.

Conization is not recommended as a cure-all for all types of gynecological disorders. To insure success all pathology extraneous to the cervix must be carefully looked for and treated. Symptoms due to other causes than endocervicitis must be traced to their site or origin, e.g., a discharge resulting from uterine retrodisplacement must have its own specific treatment.

I coned a cervix in 1932, and sent the specimen to one of the leading pathologists of our city and he pronounced it cancer. I

advised radium but it was never used and the woman has had no trouble since.

I had a case of lacerated cervix with infection complicated with retroversion with adhesion. I coned the cervix, went in above, broke up the adhesions, replaced the uterus and found her to be pregnant six weeks with no history of missing a period. She did not abort or have any troubles in any way.

In conclusion, conization of the cervix is a valuable, safe, and rapid, eminently satisfactory way of treating benign lesions of the cervix, also as a preventative of malignancy.

When the cutting current is properly handled, the operation becomes a bloodless procedure, and in this respect is in striking contrast to most cervical operations. After years of experience and careful follow-up of cases, I feel that extensive conization is not to be viewed as a substitute for simple cauterization, or coagulation as neither of these should be used in the cervical canal proper, for they create a strong tenaceous stricture, while the electric knife scar is soft and easily dilated. On the other hand, the benefits from extensive conizations are real, results are excellent and mortality is nil, and it should have a place in everyday gynecological surgery.

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CHEST X-RAY SURVEY PROGRAM IN OKLAHOMA*

RICHARD M. BURKE, M.D.

OKLAHOMA CITY, OKLAHOMA

The State Department of Health has had a Division of Tuberculosis Control since 1937. The backbone of its case finding efforts has been the examination and follow-up of known cases and their contacts. At present this program is well established in all 38 county health departments, 32 of which have their own x-ray equipment (see Fig. 1). Regular monthly clinics are held at which 15,000 persons were examined last year. This is very important work, but it has needed to be supplemented by much broader case finding measures. The answer to this problem was the introduction of mass survey methods with photofluorographic equipment. This got underway in 1945, using one 35mm. photo-roentgen apparatus. In March, 1947, three 70mm. machines were placed in field operation. In addition we also have in use eight other photo-roentgenographic machines in hospitals and county health departments.

The goal of our present survey program is to provide an opportunity for every adult in Oklahoma to have a chest x-ray by 1951. The state is being covered county by county, giving first preference to counties with the higher death rates. (National and state tuberculosis mortality rates are pictured in Figures 2 and 3). Thus far 15 counties have been reached and 220,000 miniature films taken.

COUNTY ORGANIZATION

Preliminary survey organization in the county is done under the supervision of a public health educator, whose activities begin two months before the x-raying starts. Among the points stressed in discussing the program with various groups are:

1. Primary interest is to discover tuberculosis, although many other diseases, notably heart disease, are found.
2. Tuberculosis is a contagious disease which does not produce symptoms in the early stages.
3. The x-ray is the only reliable method of early diagnosis.
4. The photofluorogram is a screening

medium, and a standard size x-ray is to be taken when a suspicious lesion is noted.

5. The patient's private physician receives all x-ray reports of abnormal findings.

The contemplated program is first explained to the county medical society, and its approval and guidance solicited. The next step is to organize a central x-ray survey committee, which is made up of representatives from all civic groups. A chairman is selected and the various committees appointed (see Fig. 4). An important role in organization is played by the county tuberculosis association, while overall medical direction is provided by the local health department. Costs are borne by the state health department and the local tuberculosis association.

CONDUCT OF SURVEY

Two mobile and one transportable 70mm. photo-roentgen machines are used (see Fig. 5). The field staff consists of four technicians, one clerk, one public health nurse and one public health educator. All films are processed and interpreted in Oklahoma City.

A short, intensive survey is conducted during which every person over 14 years of age is offered an opportunity to be x-rayed. No charge is made. Everyone receives a report of the findings within two weeks. Those with non-tuberculous conditions are referred directly to their physician, who is furnished a report.

Those showing evidence of significant reinfection tuberculosis are requested to return for a standard size film. If the second film confirms the need for further study or treatment, the individual and his doctor are informed. County health department nurses attempt to see that the proper care and follow-up is carried out for all cases of clinical significance. Where there is no local health department, a field nurse of the state tuberculosis association does the follow-up.

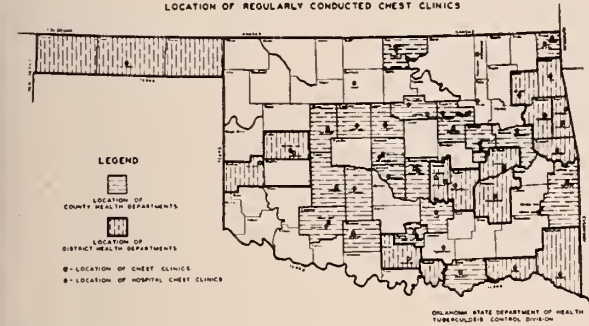
SURVEY COSTS

The total cost per 70 mm. film taken, excluding capital cost and depreciation, was 30 cents. Of this amount an average of five cents per film was paid by the local tuber-

*Presented before the Medicine Section of the Oklahoma State Medical Association at the Annual Meeting, May 14, 1947.

Fig. 1. Location of Tuberculosis Clinics in Oklahoma.

TUBERCULOSIS IN OKLAHOMA
LOCATION OF REGULARLY CONDUCTED CHEST CLINICS



culosis association. Cost per case of tuberculosis discovered was \$60.00, while the cost per active and questionably active case found was \$287.00.

SURVEY RESULTS

The progress of the program is shown in Fig. 6. Since June, 1946, an average of 45 percent of the population over 14 years of age have been x-rayed in the counties visited. We hope to do better by adding door to door canvassing to our campaign efforts. At present about three weeks are required to cover an average county.

A summary of the findings of the 11 counties completed during the past year is given in Fig. 7. Each county tabulation is made up three months after the survey is completed. By this time most of the required observation and studies in the questionable cases have been finished. Some noteworthy pathology was found in two percent of those x-rayed, of which 1.1 percent was reinfection tuberculosis. New active tuberculosis was found in .08 percent, or one per 1100 x-rayed. Previously known cases of tuberculosis x-rayed averaged two per 1,000 and are not figured in the tabulations.

It is well to point out that while 70 percent of all significant reinfection tuberculosis found, exclusive of pulmonary scars, were classified as minimal lesions, yet 88 percent of them were arrested. The majority of the active lesions discovered were in the advanced stages.

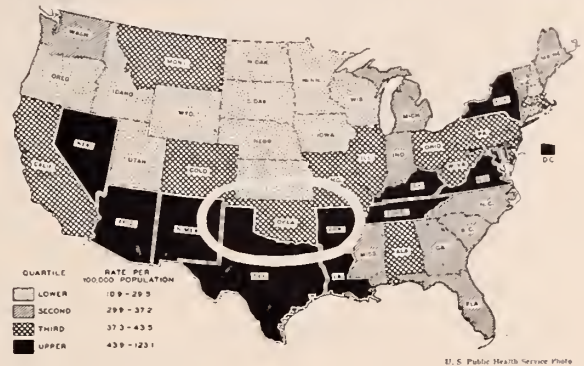
Under non-tuberculous pathology heart disease led by a wide margin. One enlarged heart was found per 170 x-rayed. Aneurysm of the aorta was rarely encountered. Malignancy including Hodgkin's disease was diagnosed once in every 19,000 x-ray examinations.

OKMULGEE COUNTY

Fig. 8 gives in some detail the results of a representative survey done in Okmulgee County. This county's tuberculosis mortality rate in 1945 was 42.8 percent (20 deaths) as compared with the state rate of 40.8 per-

Fig. 2.

National Distribution of Tuberculosis Deaths for 1945.



cent.

There were 18,200 films taken (45 percent of the population over 14 years of age). The survey reached 50.5 percent of the white and 25.5 percent of the non-white (largely Negroes). In the more densely populated areas a much higher percentage of the population was reached than in the rural areas. For example, in Okmulgee 59.3 percent and in Henryetta 60 percent were examined, whereas the percentage for the rest of the county was 27.8 percent. As to age, 55 percent of the persons x-rayed were over 35 years of age. The pathology increased constantly with age, reaching a peak in all race groups among those persons 65 years of age and older.

The Okmulgee County survey discovered 109 new cases of reinfection tuberculosis plus 95 pulmonary scars. This latter term is used to include those films which exhibit the fine linear strands or discrete well-defined fibrotic nodules frequently seen in the upper third of the lung field. It is usually possible to differentiate those pulmonary and apical-pleural scars from the more significant lesions characteristic of minimal tuberculosis. Individuals with such changes are not placed on the case register.

Eighteen persons were recommended for sanatorium care. Ten entered sanatoria (three Clinton; five Talihina; one Sulphur; one Arkansas State Sanatorium). At the end

Fig. 3. Oklahoma Mortality Map.

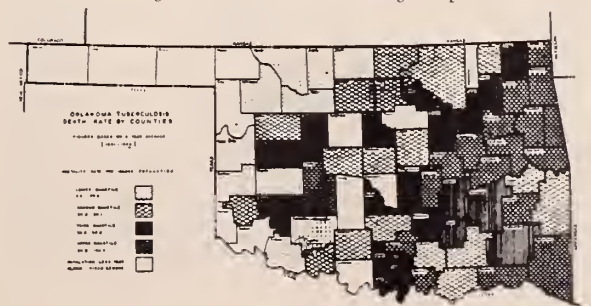
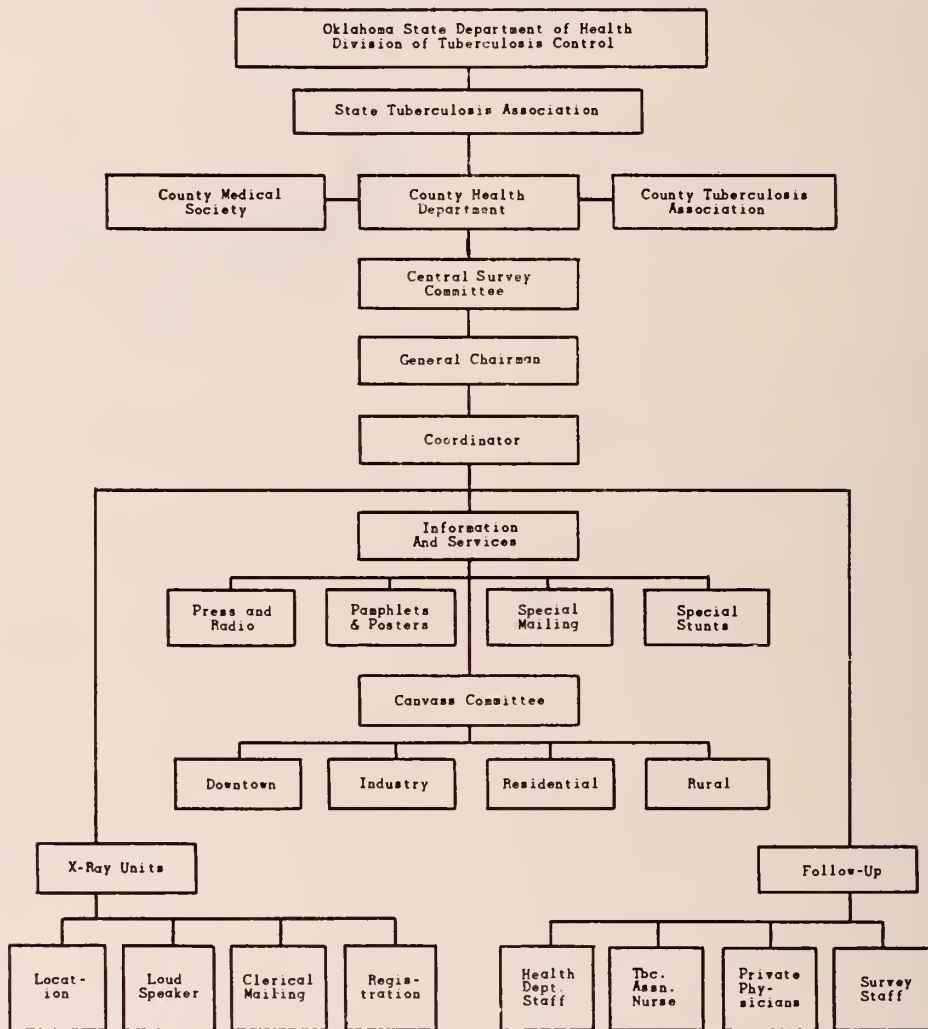


Fig. 4. Organization Chart for County-Wide X-Ray Surveys.



of one year follow-up reveals that two are still in sanatoria, two died of tuberculosis, three were discharged as arrested. Two left sanatoria against medical advice, one of which is arrested and the other now classified as activity questionable. On one patient we have no recent record.

Of the eight who did not enter a sanatorium two are still under private physi-

cians' care, current status unknown. Five were followed by the county health department; of these one died, two are still active and two are arrested. On one patient we have no current record.

ing methods. Thus far 220,000 adults have been x-rayed, of which 1.1 percent showed evidence of reinfection tuberculosis. One new active case per 1,100 x-rayed is found.

A summary of the findings in 11 counties

Fig. 5. Two Mobile X-Ray Machines.



Fig. 6. Map of X-Ray Surveys Completed in Oklahoma.

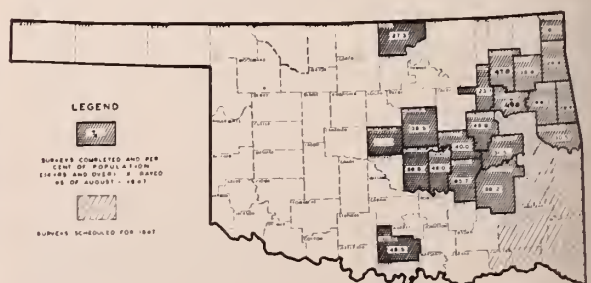


Fig. 7. Summary of County X-Ray Surveys.

COUNTY	POPULATION	NO. OF X-RAYS TAKEN	PERCENTAGE OF POPULATION 14 YEARS & OVER X-RAYED	NEW REINFECTION TUBERCULOSIS FOUND (INCLUDING PUL. SCARS)		NO. NEW TB CASES FOUND (EXCLUDING PUL. SCARS)		NO. NON-TB PATHOLOGY FOUND		PERCENTAGE NON-TB PATHOLOGY FOUND
				No.	%	Active	Arrested	Cardiac	Other Pathology	
Okmulgee	46,065	18,200	49	228	1.3	20	89	34	64	0.5
Pittsburg	47,864	13,328	39	170	1.3	11	65	48	27	0.6
McIntosh	23,580	4,721	32	64	1.4	6	29	21	5	0.6
Pottawatomie	46,755	24,494	60	268	1.1	10	83	106	42	0.6
Lincoln	26,477	7,077	39	41	0.6	4	17	41	30	1.0
Okfuskee	24,295	6,421	40	49	0.8	3	26	67	57	1.9
Carter	44,650	15,384	49	170	1.1	19	54	147	102	1.6
Seminole	47,846	15,045	46	134	0.9	10	50	152	50	1.3
Hughes	28,359	8,703	46	85	1.0	6	39	63	90	1.8
Cherokee	23,611	6,739	44	76	1.1	9	35	53	64	1.7
Adair	16,479	5,235	49	86	1.6	9	31	42	59	1.9

ARE COUNTY SURVEYS WORTHWHILE?

County-wide x-ray surveys are profitable and justify the expense and effort involved. The survey must be properly organized and the county covered in a systematic manner. Adequate provisions for follow-up of cases found and their contacts is vital to the success of the survey. Without this no survey should be undertaken.

The figures from Okmulgee illustrate the value of a survey as a supplement to other case finding methods. This county has had an organized health department which has been conducting monthly chest clinics for six years. An average of 300 are thus x-rayed annually. Four new active cases were discovered in 1945. Contrast this figure with 109 new cases, which included 18 active cases, discovered by a survey requiring a few weeks of intensive effort.

Similar figures are obtained from other counties. In Carter County, for example, regular chest clinics have been discovering an average of five new active cases per year. Following a recent survey 73 new cases were discovered, 16 of which had active disease.

Such figures forcefully illustrate that, with only periodic chest clinics which concentrate on known cases and their contacts, we have been a long way from carrying out an effective case finding program. Now that we are able to direct more attention to the adult non-contact, we are finding that it pays big dividends.

SUMMARY

A profitable county-by-county mass x-ray survey program is well underway in Oklahoma, supplementing established case finding. The results of the Okmulgee County

survey are recorded in some detail.

Fig. 8. Okmulgee County Survey Summary.

OKMULGEE COUNTY SURVEY
A. General Summary

	No.	Percent
Total number of miniature x-rays taken	18,200	
Percentage of population over 14 years x-rayed....		49.0
Recommended for standard size film	480	2.6
Retakes made	410	85.4
Total number diagnosed reinfection tuberculosis (including 95 or 41.7 percent pulmonary scars)	228	1.3
Cases previously known....	24	0.1
New cases (excluding pulmonary scars)	109	0.6
Sanatorium care recommended	18	
Number who entered sanatoria	10	62.5
Non-tuberculous chest pathology	98	0.5

B. Stage of Disease and Activity
New Cases of Reinfection Tuberculosis
(excluding pulmonary scars)

Activity	Stage of Disease			
	Total	Minimal	Mod. Adv.	Far Adv.
Active	20	5	12	3
Arrested	89	74	15	
TOTAL	109	79	27	3

C. Non-Tuberculous Chest Pathology		Pulmonary abscess	1
Basal fibrosis (chronic inflam.		Eventration of diaphragm	1
residual)	24	Mediastinal tumors	3
Pleurisy, old	19	Miscellaneous	5
Pneumoconiosis (six anthracosis) ..	8	Cardiac pathology	34
Emphysema	2		—
Bronchiectasis	1		98

CLINICAL PATHOLOGIC CONFERENCE

The University of Oklahoma School of Medicine

Presented by the Departments of Pathology and Pediatrics

HOWARD C. HOPPS, M.D. AND HENRY B. STRENGE, M.D.

OKLAHOMA CITY, OKLAHOMA

DR. HOPPS: The case for this morning represents a disease of considerable importance; one which is a fairly common cause of death, not only among infants and children, but among adults as well. We are glad to have Dr. Strenge with us to discuss and analyze the clinical aspects of this case.

PROTOCOL

Patient: N. L. C., five month Mexican female, admitted March 11, 1947; died March 20, 1947.

Chief Complaint: Cough, fever, general irritability.

Present Illness: On February 1, 1947, the child seemed to develop a "head cold" and vomited. She became irritable and slept poorly. There was no fever or diarrhea. Four days later she was seen by a physician and treated for a head cold. She did not improve and in the latter part of February began to run a fever. Her physician then performed a bilateral myringotomy. Following this the ears drained for several days and there was some general improvement. However, two weeks prior to admission she became worse and developed a dry cough which was still present on admission.

Past History: Full term spontaneous delivery. Birth weight, six pounds; bottle fed with a formula containing pasteurized milk. She received cod liver oil and orange juice regularly. There had been no immunizations. The following statement appeared in the chart: "Chicken pox four weeks ago?", without comments.

Family History: The father died, supposedly from pulmonary tuberculosis, two

months prior to the onset of the patient's illness. The mother and other children were said to be well. The mother had recently had a chest x-ray reported as negative.

Physical Examination: The child was in fair state of nutrition, very irritable, and had a dry cough. No light reflexes were visible in the ears, but there was no discharge from the ears. There was marked rigidity of the neck and back, but Kernig's sign was negative. The lungs were clear to percussion and auscultation. The heart was negative. The liver was palpable two fingers breadth below the right costal margin, and the spleen three fingers breadth below the left costal margin. There were no statements concerning the consistency, tenderness, etc., of these organs.

Laboratory Data: On March 12, 1947, the urine showed a trace of albumin, some amorphous casts, and three to five WBC's per HPF. Hemoglobin was 9.5 Gm. RBC 3,750,000. WBC 11,940 with 63 per cent polys, 25 per cent lymphocytes, 11 per cent monocytes, and one basophil. Spinal fluid: globulin negative, protein 20, chlorides 690, sugar 72. There were no cells. A Gram stain revealed no organisms and culture of the fluid did not produce any growth. There was no pellicle formation, and no acid-fast organisms on direct smear. A blood Mazzini test was negative.

Clinical Course: On admission spinal taps at three different levels were bloody. On the following day spinal tap showed clear fluid under increased pressure with the above mentioned findings. Chest x-ray the follow-

ing day was interpreted as miliary tuberculosis. Penicillin, 15,000 units, was given every three hours. A tuberculin patch test was positive. The patient's condition was recognized as being critical shortly after admission. Her temperature ran an irregularly septic course with spikes of increasing heights, reaching 104° to 105° during the last four days. A nurse found her dead at approximately 2:03 p.m. on March 20, 1947. No new signs or symptoms had developed that day.

CLINICAL PRESENTATION

DR. STRENCE: The diagnosis in this case seems rather obvious and I shall proceed on the assumption that things were as the clinicians recorded them and as they have been presented to us here. The fact that this is a five month old Mexican female is sufficient in itself to suggest several diseases; malnutrition, perhaps some blood dyscrasia, tuberculosis and syphilis. Though such generalizations are on a very broad plane, our thinking is nevertheless directed in these general channels. We read further to learn that this child had fever, cough and general irritability. This helps us very little since these complaints, in infants, commonly accompany a wide variety of conditions.

Apparently the present illness began approximately five weeks before admission to the hospital, to run a total course of but six weeks. This helps to eliminate a number of diseases which either run a more fulminating course, or are much more chronic than the case at hand. Symptoms interpreted as "head cold" with vomiting may accompany almost any infectious disease in its inception. That there was nothing very striking in the onset of this disease is borne out by the fact that the attending physician was not impressed by the physical findings. The subsequent course of this child's illness brings out one of the most important things to consider in relation to a "common cold," namely, that it may not be a common cold at all. The statement that a myringotomy was performed and the ear drained is rather difficult to evaluate without any description of what the ears looked like. It is quite possible that the child did have otitis media and this complicated what was originally an upper respiratory infection. Although there was some improvement, this did not substantially alter the course of the disease.

There is little to comment on in the past history except for the statement, "Chicken pox, four weeks ago?". This indicates to me simply that the child had some skin eruption.

Leaving this for a moment and going into the family history we find something that is very pertinent indeed—the father died, supposedly of pulmonary tuberculosis, approximately two months before onset of the present illness. If we assume that the father had intimate contact with his infant daughter, the importance of this is hard to overstress. Simply on the basis of this past history, we are forced to consider the *probability* of tuberculosis in this infant. I mentioned previously the fact that a Mexican nationality brought up the question of tuberculosis. This is because the economic status of most Mexicans in this country is of rather low order, so that not only tuberculosis is more frequent, but that opportunity of cross infection within the family is much more apt to occur because of crowded living conditions. This, obviously, is no reflection on the nationality as such. Since we have a very definite lead that the child might have had tuberculosis the question arises, are there skin lesions of tuberculosis which may resemble those of chicken pox? Yes. Tuberculids may appear which are of maculo-papular type and which may rather closely simulate the lesions of chicken pox. There is some question as to whether they are a strictly allergic reaction or possibly the manifestation of hematogenous dissemination with the skin lesions a direct effect of tubercle bacilli at that site. If the lesions were tuberculids there should have been some evidence of them at the time of admission to the hospital. These are not described and this is somewhat against the diagnosis of tuberculous skin lesions.

Upon considering the physical examination, we note first that the child was fairly well nourished. Since the duration of illness was only a few weeks, we conclude that there had not been sufficient time to develop obvious signs of malnutrition. The dry cough which was described is not a usual symptom of tuberculosis in infants, but might have followed involvement of tracheo-bronchial lymph nodes with compression of air passages. Tuberculous otitis media is more common than is ordinarily considered, and it is possible that the otitis media described was tuberculous. Strongly against this, however, is the fact that the ears cleared up after myringotomy, and stopped draining. Characteristically tuberculous otitis media is a very chronic lesion and ordinarily there are multiple perforations of the drum. Rigidity of the back points toward meningitis, but interpretation of signs of meningeal irritation is quite difficult in a five month old in-

fant. The fact that the Kernig's sign was negative would not rule out meningitis. Conversely, the finding of stiffness of the back would not necessarily make a diagnosis of meningitis. We find such signs frequently in acute infectious lesions involving the lungs, etc. These may simply reflect generalized irritability and hypertonicity. The state of the fontanel in an infant of this age is very important in influencing our final decision. If the fontanel is depressed, even in the presence of rigidity of the neck, I would be inclined to discount the rigidity as a manifestation of meningitis.

In no case of this sort would I wish to make a final decision without an examination of the spinal fluid. It is stated that the lungs were clear to physical examination. This does not at all rule out the possibility of pulmonary tuberculosis. We find a clear chest in infants suffering tuberculosis at least as often as we find significant physical abnormalities except in the terminal stages of the disease. The liver and spleen were both palpably enlarged. This helps considerably in strengthening our diagnosis since tuberculosis is one of the common causes of splenic and hepatic enlargement as a consequence of miliary tuberculosis. Syphilis is another disease which might produce these changes. Malignant neoplasia might be considered but this seems a remote possibility.

The urinary findings of slight proteinuria is compatible with any mild febrile illness. Similarly, the anemia, white count and differential are not significant. The apparent increase in monocytes is vaguely suggestive but I doubt that we would pay much attention to it if we weren't thinking primarily of tuberculosis. Spinal fluid findings are important, but most of these here seem to be within normal limits. The low protein content, the relatively normal chlorides and sugar is rather against tuberculosis. Finally, the spinal fluid cell count would largely rule out active tuberculous involvement of the meninges. It is stated further that no pellicle was formed in the fluid. This is not a pathognomonic sign, nor does its absence necessarily rule out tuberculous meningitis. Pellicle formation is largely a manifestation of increased protein content, particularly fibrinogen. We do not expect a pellicle to form in any spinal fluid with low protein content. One may observe pellicle formation in spinal fluid with other types of meningitis, but there the fluid is usually cloudy because of the high cell count. In tuberculosis, the large amount of protein is disproportionate

to the number of inflammatory cells so that we do see the rather characteristic picture of pellicle formation in a fluid that is relatively clear.

The child was treated with penicillin for its cough and fever without much effect. This helps further in eliminating from our consideration what we might term non-specific infectious processes. The chest x-ray was read as showing miliary tuberculosis. I accept that as being compatible with the other findings and conclusive evidence of pulmonary tuberculosis with hematogenous dissemination and probable tuberculous meningitis as a terminal event.

CLINICAL DISCUSSION

QUESTION: In regard to examination of the spinal fluid which was done some time before death, is it possible that tuberculous meningitis was present, but not sufficiently advanced at that time to give the characteristic changes?

DR. STRENGE: We have evidence of increased intracranial pressure and this might have been an effect of a tuberculoma which during the last eight days of the child's life perforated into the spinal fluid only at that time to give rise to tuberculous meningitis. Under those circumstances the earlier puncture would have missed such changes. There is no physical finding upon which I could positively make a diagnosis of tuberculous meningitis. On the basis of probability however, since most all children of this age who die of miliary tuberculosis have a co-existing tuberculous meningitis, I feel relatively safe in including this in the diagnosis.

One thing that I neglected to mention was the positive tuberculin patch test. Clinically, we feel rather fortunate when we obtain a positive tuberculin test in cases of this sort because, with overwhelming tuberculous infection, the tuberculin test frequently becomes negative after five or six weeks (in the terminal phase), the so-called anergic stage of the disease.

QUESTION: Do you expect generalized lymphadenopathy in miliary tuberculosis?

DR. STRENGE: We often see lymphadenopathy in miliary tuberculosis, but it is not a specific finding and there are many cases which do not show it. Childhood tuberculosis is a disease which involves lymph nodes but the involvement may be limited to the mediastinal or abdominal lymph nodes, depending upon the point of entry.

QUESTION: How often do you encounter a positive skin test in infants with miliary tuberculosis?

DR. STRENGE: I would say in about two-thirds of the cases.

ANATOMIC DIAGNOSIS

DR. HOPPS: From a morphologic standpoint this was a rather typical case of miliary tuberculosis. The lungs together weighed 290 grams, approximately four times the normal. They were discolored, dark reddish purple, and many grayish white nodules approximately the size of a millet seed (0.2 cm.), could be seen scattered diffusely underneath the pleural surface and on all cut surfaces. Thus the picture was quite typical of hematogenous miliary tuberculosis.

In the lateral aspect of the right upper pulmonic lobe there was a tubercle which was quite different from the others. It was 0.8 x 0.7 cm., much larger than any of the others. This tubercle was sub-pleural and presented the characteristic picture of a primary tuberculous affect. The hilar lymph nodes which drained this area were markedly involved and as large as 1.5 cm. They were largely replaced by tuberculous granulation and caseous tissue. The large sub-pleural tubercle, together with the involved mediastinal lymph nodes, comprised the primary tuberculous complex which represented the initial localization of the tuberculous lesion in the lung and the secondary spread to the lymph nodes draining the involved area. This, then, was the lesion from which tubercle bacillae spread to the rest of the body.

The spleen was enlarged about two and one-half times. The liver too was enlarged about two times, and these organs, as well as the kidneys, presented on multiple cut surfaces the tiny grayish white nodules so characteristic of miliary tuberculosis. A somewhat unusual lesion was found in the abdomen, in the periaortic lymph nodes near the head of the pancreas. These lymph nodes were also markedly involved by the tuberculous process. As a rule, we don't see this involvement if the primary tuberculous complex is within the lung. This was probably an effect of an unusual spread of lymph from the lung drainage through the diaphragm to involve the periaortic lymph nodes. Under such circumstances we could consider these periaortic lymph nodes as a part of the primary tuberculous complex.

The brain was carefully examined. It was first apparent that there was a moderate excess of cerebrospinal fluid, and that is the same finding that was observed clinically, as reflected in increased intracranial pres-

sure. We were somewhat disappointed that the brain showed no spectacular lesions, but careful inspection of the base did reveal an occasional tiny miliary tubercle within the leptomeninx. This is pertinent to the discussion about spinal fluid changes in tuberculous meningitis; the meningitis was minimal at the time that this child died.

Histologic studies confirmed our gross impression of minimal tuberculous meningitis and there was such slight exudation that it could hardly have been expected to alter the character of the spinal fluid at the time that the study was made.

What of the pathogenesis of tuberculous meningitis in this case? You will recall that this is a somewhat controversial subject and that there are two major schools of thought. One, championed by Dr. Arnold Rich, of Johns Hopkins University, is to the effect that tuberculous meningitis is usually a consequence of a tuberculoma or tubercle of the brain proper with extension and finally rupture into the leptomeninges. According to this thought, tuberculous meningitis is secondary to a well established lesion within the brain substance. Others are of the opinion that tuberculous meningitis is a direct consequence of hematogenous dissemination and that it does not require the intermediate step of a tuberculous lesion in the brain substance. In this case the brain was sectioned serially at 0.5 cm. intervals and we were rewarded by finding a sub meningeal tubercle 0.3 cm. in diameter which was definitely older than any of those in the meninges. It appears that this was the immediate source of the tuberculous meningitis. Our final anatomic diagnosis was:

Primary pulmonary tuberculous complex, recent, active, right upper lobe

Miliary dissemination to lungs, spleen; liver, peripancreatic lymph nodes; adrenal glands; kidneys and diaphragmatic pleura

Caseous tubercle within the substance of the cerebellum with tuberculous meningitis.

DISCUSSION

QUESTION: What is the age of the tubercle in the brain as compared with the tubercles throughout the rest of the body?

DR. HOPPS: Certainly it is not so old as the primary tuberculous complex of the lungs. It is about as old as the older ones found in the spleen and other portions of the lungs as a consequence of hematogenous dissemination. This brings up the point of tuberculous *bacillema* as the means by which

tubercle bacillae can circulate through the blood and localize in the various organs without necessarily producing the clinical picture of miliary tuberculosis. This localization with subsequent proliferation may ultimately cause death on the basis of local reaction. Such manifestations of tuberculous bacillema are frequent and they may present in the form of Pott's disease if the focus of tuberculous involvement was in the dorsal spine. If, on the other hand, localization occurred in the suprarenal glands, Addison's disease might develop years following the initial infection. I reconstruct the sequence of events in this way; that early in the course of the child's life it contracted tuberculosis from its father, and that the primary tuberculous complex in the lung gave rise to tuberculous bacillema with spread of tubercle bacilli to other organs including the brain, but without clinical evidence of the disease miliary tuberculosis and without evidence of serious illness. The tuberculous process in the lungs continued to grow leading to a rather heavy seeding of the blood stream and a clinically evident miliary tuberculosis, which actually occurred after the tubercle in the brain had become established.

Finally, the tubercle in the brain extended to and involved the leptomeninges producing tuberculous meningitis. Does this seem logical to you, Dr. Strenge?

DR. STRENGE: Yes. Could you determine for us approximately the age of the oldest tuberculous lesion in order that we may correlate it more precisely with the clinical findings?

DR. HOPPS: This is rather difficult to do. The clinical symptoms were approximately of six weeks duration and I would place the age of the oldest tubercle at perhaps 10 to 14 weeks, so that on the basis of this, it would appear that the clinical manifestations occurred rather soon after infection.

DR. STRENGE: One comment that is very much in order here pertains to the social aspects of tuberculosis in general and to the fatal illness of this patient in particular. I think it is evident to us all that if the tuberculosis from which this father suffered had been diagnosed, and if the father had been isolated, and not allowed intimate contact with his child, that the infant we have discussed this morning would be alive and well today.

SUNDAY, MAY 16, 1948

- 10:00 A.M.—Council Meeting
- 2:00 P.M.—House of Delegates, Crystal Room, Skirvin Hotel
- 2:00 P.M.—Academy of General Practitioners, Wilson Room, Skirvin Hotel
- 6:30 P.M.—Buffet Dinner, Oklahoma County Medical Society, Continental Room, Skirvin Hotel
- 6:30 P.M.—Class of 1938 Dinner Dance, Venetian Room, Skirvin Hotel
- 8:00 P.M.—House of Delegates, Crystal Room, Skirvin Hotel

MONDAY, MAY 17, 1948

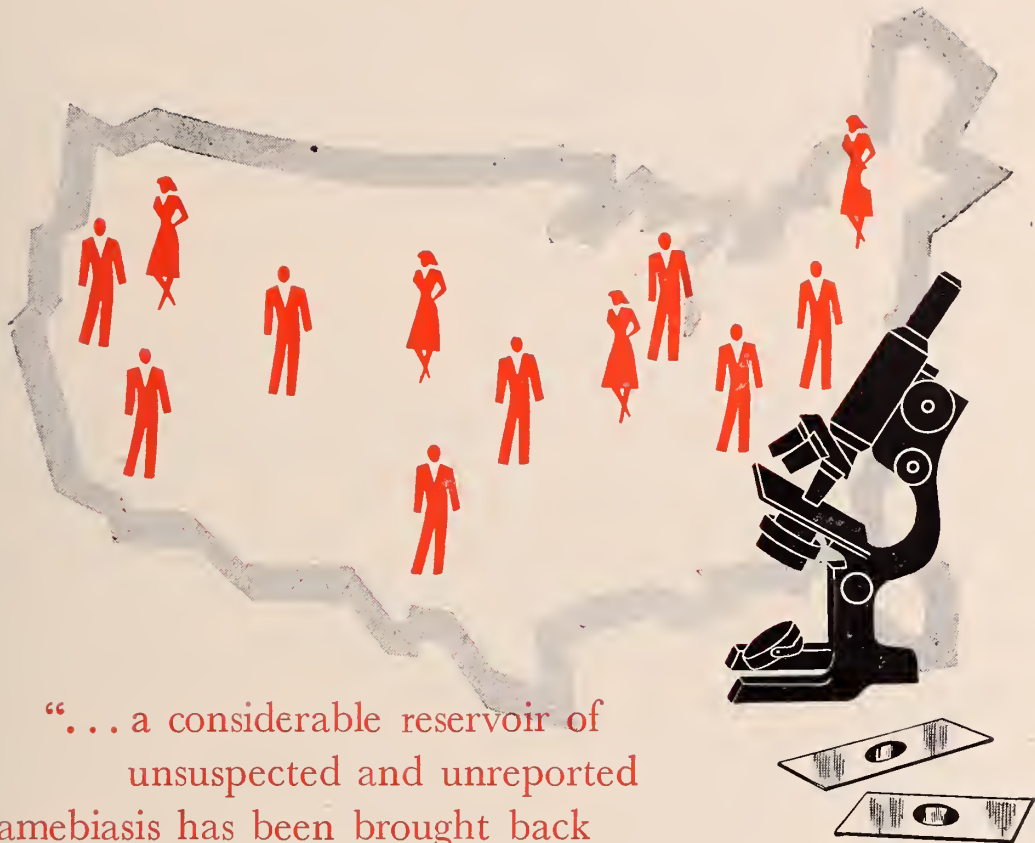
- 9:00 A.M.—House of Delegates (if third meeting is necessary)
- 9:00 A.M.—Scientific Program, Convention Hall, Skirvin Tower Hotel
- 12:30 P.M.—Roundtable Luncheon, Crystal Room, Skirvin Hotel
- 1:00 P.M.—Golf Tournament, Oklahoma City Golf and Country Club
- 1:00 P.M.—Skeet Shoot, Oklahoma City Golf and Country Club
- 2:00 P.M.—General Scientific Session, Convention Hall, Skirvin Tower Hotel
- 6:00 P.M.—O. U. Alumni Fellowship Hour, Continental Room, Skirvin Hotel
- 7:00 P.M.—O. U. Alumni Banquet, Venetian Room, Skirvin Hotel

TUESDAY, MAY 18, 1948

- 8:00 A.M.—Breakfast Past Presidents
- 9:00 A.M.—Scientific Program, Convention Hall, Skirvin Tower Hotel
- 12:30 P.M.—Roundtable Luncheon, Crystal Room, Skirvin Hotel
- 2:00 P.M.—Scientific General Session, Convention Hall, Skirvin Tower Hotel
- 6:30 P.M.—Dinner Honoring Guest Speakers and Sponsors, Wilson Room, Skirvin Hotel
- 8:00 P.M.—Scientific Symposium, Crystal Room, Skirvin Hotel

WEDNESDAY, MAY 19, 1948

- 9:00 A.M.—Scientific Program, Convention Hall, Skirvin Tower Hotel
- 12:30 P.M.—Roundtable Luncheon, Crystal Room, Skirvin Hotel
- 2:00 P.M.—Meeting of Officers of County Societies
- 2:00 P.M.—General Scientific Session, Convention Hall, Skirvin Tower Hotel
- 7:00 P.M.—President's Inaugural Dinner Dance, Silver Glade Room, Skirvin Tower Hotel



“... a considerable reservoir of unsuspected and unreported amebiasis has been brought back to the United States....”¹

Urging clinicians and roentgenologists to be on the alert for signs of this disease, Wilbur and Camp² note the frequency with which the radiologist finds unsuspected lesions, ultimately diagnosed as amebiasis.

Diodoquin . . . high-iodine-containing amebicide . . . “is a valuable addition to the therapeutic remedies available for the treatment of this insidious and intractable disease.”³

Diodoquin may be employed in acute or latent forms of amebiasis. Relatively nontoxic, well tolerated, Diodoquin does not produce unpleasant purgation and may be administered over prolonged periods.



DIODOQUIN SEARLE

(5,7-diiodo-8-hydroxyquinoline)

RESEARCH

IN THE SERVICE OF MEDICINE

1. Editorial: *The Problem of Amebiasis*, J.A.M.A. 134:1095 (July 26) 1947.
2. Wilbur, D. L., and Camp, J. D.: *Amebic Disease of the Cecum: Clinical and Radiological Aspects*, *Gastroenterology* 7:535 (Nov.) 1946.
3. Morton, T. C. St. C.: *Diodoquin for Chronic Amoebic Dysentery in Service Personnel Invalided from India*, *Brit. M.J.* 1:831 (June 16) 1945.

Diodoquin is the registered trademark of G. D. Searle & Co., Chicago 80, Illinois.

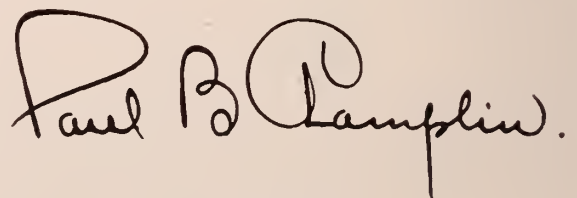
President's Page

To serve as the President of the Oklahoma State Medical Association is both an honor and an experience that no one who has served in that capacity will ever forget.

From the quietness of your private practice you overnight become an authority on public relations, advertising, radio, insurance, the law, a parliamentarian, a father confessor, etc., and then all of a sudden you realize you will soon be a past president. Your thoughts immediately go to the many things you had hoped to accomplish and in which you failed. You review the future to see what it holds and it is with a mingling of pride and joy that you think of the many physicians who are ready to carry on. You think of the unselfishness of those who have helped you during the year and you soon realize that the principles of medicine transcend the stature of the individual and that so long as medicine survives as an art there is little to fear for the future.

To the individual members and the county societies I pay homage. In their strength lies the strength of our profession.

In retiring as President I pledge my support to those who will succeed me and I know full well that all of their time and energies in the development of their profession will be well repaid. I have found it so.

A handwritten signature in dark ink, reading "Paul B. Campbell." The signature is written in a cursive style with a large, stylized initial "P" and "C".

President.

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his signals . . .



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ANNUAL MEETING REVIEW

Approximately 1000 Oklahoma physicians are expected to attend the 55th Annual Meeting of the Oklahoma State Medical Association which opens in Oklahoma City Monday, May 17, and closes with the President's Inaugural dinner-dance Wednesday night, May 19.

Section meetings, general sessions, symposium, technical exhibits, scientific exhibits will be included in the scientific part of the program with a golf tournament, skeet shoot, buffet dinner, dinner-dance and other events on the entertainment schedule. A complete program of activities has also been planned for the Women's Auxiliary of the O.S.M.A.

The House of Delegates will convene on Sunday, May 16, at the Crystal Room of the Skirvin Hotel with the first meeting slated for 2 p.m. and the second for 8:30 p.m. The Council will convene on call by the President. Paul B. Champlin, M.D., Enid, is president of the Oklahoma State Medical Association and C. E. Northcutt, M.D., Ponca City, is president-elect. Lewis J. Moorman, M.D., is secretary-treasurer and George H. Garrison, M.D., is speaker of the House of Delegates. Both are from Oklahoma City.

Guest speakers include: Laman Gray, M.D., Louisville, Ky., obstetrics and gynecology, assistant professor of obstetrics and gynecology, Louisville University; Vincent Vermooten, M.D., Dallas, Texas, urology, professor of urology, Southwestern University School of Medicine; Franklin H. Top, M.D., Detroit, Michigan, public health, director Herman Kiefer Hospital, clinical professor of preventive medicine, Wayne University, extramural lecturer in epidemiology, school of public health, University of Michigan; Richard B. Cattell, M.D., Boston, Mass., surgery, general surgery Lahey Clinic, Boston, surgery New England Baptist Hospital, surgeon-in-chief, New England Deaconess Hospital;

Jack R. Ewalt, M.D., Galveston, Texas, neuro-psychiatry, professor of neuro-psychiatry University of Texas, Galveston, director Psychopathic Hospital, University of Texas, civilian consultant to Brooke Army Medical Center; A. W. McAlester, III, M.D., Kansas City, Mo., ophthalmology; L. Henry Garland,

M.D., San Francisco, Calif., radiology, president Radiological Society of North America, secretary California State Medical Association, associate clinical professor of medicine and radiology at Stanford, radiology St. Joseph Hospital, consultant Lederman General Hospital; Helen Taussig, M.D., Baltimore, general medicine, Johns Hopkins Hospital, outstanding specialist congenital heart disease; Arild Hansen, M.D., Galveston, Texas, pediatrics, chairman department of pediatrics, University of Texas School of Medicine, director of child health program, University of Texas.

Speaker at the President's Inaugural Dinner Dance to be held in the Silver Glade Room of the Skirvin Tower Hotel is Alan R. Motiz, M.D., of the Department of Legal Medicine, Boston, Mass. He will speak on "Medicine's Contribution to Crime Detection."


Complete convention program appears in the April, 1948, issue of the Journal but a summary program appears elsewhere in this issue.

WOMEN'S AUXILIARY

Registration for the Women's Auxiliary will be held Sunday, May 16, mezzanine, Skirvin Hotel, from 4:00 to 6:00 p.m. and from 10:00 a.m. to 3:00 p.m. Monday, May 17, and from 5:00 to 7:00 p.m. Monday.

A tea will be given by Governor and Mrs. Roy J. Turner at the Governor's Mansion from 3:00 to 5:00 p.m. May 17. The executive board meeting will also be held on Monday at the home of Mrs. Ray Balyeat.

Following registration on May 17 from 9:30 to 1:30 a.m., the business meeting will begin at 9:45 a.m. at the Continental Room, Skirvin Hotel. Report of county presidents will be given and Mrs. Ollie McBride will give a report on the American Medical Association convention. Mrs. Ray Balyeat will give the Southern Medical Association report. At 12:15 p.m. the same day a luncheon and style show will be held at the Venetian Room of the Skirvin Hotel. Mrs. Olin S. Cofer, president of the Southern Medical Association Auxiliary will speak on "Love, Friendliness and Good Fellowship."



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GENERAL NEWS

SPECIAL TRAIN TO A.M.A.- CANADA IN JUNE

Oklahoma and Kansas physicians once again may attend the A.M.A. convention scheduled this year for June 21-25 at Chicago, via a Special Train sponsored by the two state medical associations.

A special post-convention tour to Canada has been arranged for "special-train passengers" by the Rainbow Travel Service of Oklahoma City. This is the third trip handled by the Rainbow Travel Service for Oklahoma Physicians and their families and an interesting all-expense, 13-day vacation tour has been set up.

It is important that all interested contact the Rainbow Travel Service or the Executive Office of the Oklahoma State Medical Association for early reservations. See Rainbow's ad in this issue of the Journal for further details.

Included in the cost of the trip are round-trip first class rail tickets and Pullman accommodations, all meals from Chicago back to Chicago on post-convention tour except one luncheon at Calgary on July 5, the finest hotels—Jasper Park Lodge, Chateau Lake Louise, Banff Springs Hotel, complete sight-seeing as specified in itinerary, transfers of person and luggage at all points throughout post-convention trip after leaving Chicago back to Chicago, tipping for all luggage handling throughout tour.

Round trip fares from Oklahoma City are: two in lower (each) \$395.50; one in upper \$408.75; one in lower \$421.00; two in compartment (each) \$441.70; two in drawing room (each) \$466.05; three in drawing room (each) \$435.70. *The Santa Fe Texas Chief will leave Oklahoma City for Chicago June 19 at 6:00 p.m.*

BLUE CROSS AND BLUE SHIELD REPORTS

At least one out of every 10 Oklahoma residents is now protected by the Oklahoma Blue Cross Plan of pre-paid hospitalization insurance, according to the recent official 1947 Annual Report released by Group Hospital Service of Oklahoma. As of December 31, 1947, Blue Shield, Oklahoma Physicians' Service, allied plan of surgical and obstetrical care insurance, indicates a greater than three percent of total population enrollment figure with a remarkable increase of more than 40,000 enrollees during the year 1947.

Total state enrollment as of the end of 1947 numbers 213,278 persons in Blue Cross and 63,661 enrolled in O.P.S. 1947 completed the third year of operation of O.P.S.

The two prepayment programs show substantial gains in contingency reserves to give added strength and sound finance to the plans. It is anticipated that Group Hospital Service contingent reserves will not increase during 1948 until adjustment has been made of membership paid dues. The difference will be reflected in increased payments to members hospitals under an adjusted formula. December 31, 1947, financial reports indicate Blue Cross assets at \$430,381.43 and Oklahoma Physicians' Service assets valued at \$80,229.64. Total income for Blue Cross equalled \$1,227,650.53 and O.P.S. \$280,388.48 for 1947. Out of these income amounts, 72.3 percent was paid to hospitals by Blue Cross and 74.7 percent to physicians by O.P.S. Fourteen and four-tenths

percent was used for the cost of operation of Blue Cross and the remaining 13.3 percent added to contingent reserve as was the 10.9 percent remainder of O.P.S.

From the original year's operational high percentage costs of 1940 of 79.4 percent of income, Blue Cross has now reached the 14.4 percent level to reflect a great increase in funds available for additional hospitalization benefits to subscribers.

A statistical study of the detailed information in the Blue Cross report indicate that the average number of days spent in the hospital has decreased to 5.7 days per care from an original average of seven days per case in 1940. Average costs have risen from \$4.98 in 1940 to \$6.41 in 1947 in member hospitals.

The largest number of Blue Cross cases are tonsillitis with tonsilectomy (15 percent) and pregnancy with delivery (13.4 percent). These are followed by respiratory diseases, diseases of genito-urinary system, injuries, and poisonings. Longest average stay cases are diseases diagnosed as peculiar to the first year of life, having an average stay of 15.4 days. Neoplasms and hernia have approximate 10 days average stays. Pregnancies average 7.5 days of hospitalization.

Oklahoma Physicians' Service at the close of three years of operation is progressing to a complete surgical and obstetrical program. Officials of the plan are anticipating an expansion of O.P.S. to such an extent that the services of a full-time medical director will be necessary to insure proper administration.

Utilization figures also indicate that tonsilectomies lead the number of cases served by O.P.S. Thirty-two and five tenths of the total cases paid were tonsilectomies. Genito-urinary system diseases show 16.7 percent utilization, injuries and poisonings 9.8 percent, and pregnancies 7.9 percent. A total of 4,277 cases were served by O.P.S. during 1947.

Out of a total \$259,144.00 of physicians' charges to O.P.S. insured patients, \$190,714.25 was paid in 1947, representing a percentage of 64.6 for the state during the year.

PHYSICIAN-HOSPITAL REPORT OUTLINED

The executive committee and council of the Southern Medical Association has just released its official report after lengthy consideration of trends in the relationship between physicians and hospitals. The committee points out the following facts and suggestions.

Since many hospitals have taken over pathology, laboratory work, anesthesia, diagnostic x-ray work and in some instances x-ray therapy, collecting directly from the patients and paying the pathologist, radiologist, or anesthesiologist either on a percentage basis or salary, the question before the medical profession today is how soon will it be before the same condition is extended to medicine, surgery, obstetrics and other specialties.

Many teaching hospitals connected with large medical schools are paying their teaching staffs on a salary basis, collecting their fees and placing the excess in hospital or school deficits.

In many government built hospitals or hospitals partially financed by governments, very often which the physicians in the community have made possible, the lay boards have gradually taken over the policy of the hospital and have dictated to the staff, not only manage-



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Another symbol of safety through rigid control is the blue and white symbol of Rexall. About 10,000 conveniently located, independent drug stores display the familiar Rexall sign. It is your assurance of reliable pharmaceuticals and superior pharmacal skill in their compounding.

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ment problems, but those of nursing and medical services. The gradual increase of veterans hospitals, in which the resident staff is paid on a salary basis, has hypnotized an increasing number of physicians into selling their independence for so-called security.

State and national hospital associations are attended less and less by physicians and there have been increasing discussions of medical matters, and in a few instances scientific papers have been presented. It is the feeling of many hospital managers (who are paid on a salary basis) that the physician is receiving too much and should be placed also on a salary basis. In the past, many hospitals were owned and run by physicians but this has gradually changed and some hospital service organizations (prepayment insurance plans) have sold medical service along with hospital service.

The S.M.A. has sent a questionnaire to all physicians in the South in an attempt to obtain information on community and state trends and laws on the practice of medicine.

First of all, physicians should be informed of the facts, the S.M.A. advises, and physicians are urged to organize their own communities and states to combat this danger and to amend state laws if necessary. Action through the house of delegates of state medical associations is encouraged in an effort to influence the American Medical Association to require for hospital recognition that the hospitals do not practice medicine. It is also suggested that the state medical associations appoint special committees, whose duty shall be to appraise and prepare a report of the physician, hospital and medical school relationship in their respective states. Lastly, the report states that each society should see that medical service is not included in hospital service programs and, if so, transferred back to medical service where it belongs.

TRUDEAU SOCIETY ISSUES OFFICIAL STATEMENT

A statement of policy adopted by the executive committee of the American Trudeau Society, medical section of the National Tuberculosis Association, emphasizes that further studies are necessary to determine the true value of BCG and points out that the vaccine cannot be regarded as a substitute for approved health measures to protect the public from tuberculosis. Until additional information is obtained, vaccination of the general population cannot be recommended except for carefully controlled investigative programs, several of which are now under way. These programs, the statement suggests, are usually best carried out under the auspices of official agencies, such as the U. S. Public Health Service, state and municipal health departments and other especially qualified groups.

Although studies thus far made indicate that the incidence of tuberculosis may be reduced when groups likely to develop the disease because of unusual exposure to tuberculosis are vaccinated, the statement points out that the degree of protection afforded the individual is not complete and the duration of relative immunity is now known.

... While the vaccine, when prepared under ideal conditions and administered to tuberculin-negative persons by approved techniques, may be considered harmless, the statement does not advocate that BCG be made available for general distribution in the United States at present because: (1) the most effective strain of BCG has not been determined nor has satisfactory standardization of the vaccine been achieved, (2) the best qualified experts have not agreed as to the most effective vaccination procedure to employ and (3) fully satisfactory arrangements have not been perfected for transportation and storage of the vaccine.

... It is to be emphasized that BCG vaccination must not be regarded as a substitute for approved hygienic measures or for public health practices designed to prevent or minimize tuberculous infection and disease. Vaccination should be regarded as only one of the many procedures to be used in tuberculosis control. Vaccination seems unwarranted: (a) in areas in which the tuberculosis mortality rate is extremely low and (b) in localities in which the tuberculin test is of special value as a differential diagnostic procedure.

CLASSIFIED ADS

FOR SALE: General Electric mobile x-ray unit, complete with radiographic and fluoroscopes. Cost \$1500. Used very little. Price, \$800. Write Key C, care of the Journal.

FOR SALE: Operating table, stool, instruments, filing cabinet, set of aluminum splints (30 pieces and cases), medical books and journals, nurses uniforms (size 38), one walnut executive desk and chair, settees, and chairs. Write Key B, care of the Journal.

FILM AVAILABLE

A new teaching film entitled "Anomalies of the Bile Ducts and Blood Vessels: Strictures of the Common Duct" has just been completed and is now available for loan or purchase. The motion picture is 40 minutes long, silent, and in color. Inquiries may be directed to Ethicon Suture Laboratories, Division of Johnson and Johnson, New Brunswick, New Jersey.

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The advice is always "SEE YOUR DOCTOR"

To an audience of over 23 million people, in LIFE and other national magazines, Parke, Davis & Co. presents the message shown below. This is the 211th advertisement in the campaign in behalf of the medical profession, published continuously since 1928.

*A reproduction in full color will be sent on request.
Write Parke, Davis & Company, Detroit 32, Mich.*

Some things you should know about reducing your weight

No. 211 in a series of messages from Parke, Davis & Co.
on the importance of prompt and proper medical care.

It is an accepted medical fact that excess weight can impair your health and efficiency, and possibly shorten your life.

One person's proper weight may be quite different from another's, however—even though their height and age are approximately the same. A large-boned, muscular person, for instance, should weigh considerably more than a small-boned person of the same height and age.

How much you should weigh is something to leave up to your doctor. Only your doctor can accurately judge whether your weight is within normal limits, or whether a loss or gain in weight is medically advisable.

If your doctor tells you that you weigh more than you should, it's just good sense to do something about it under his supervision. To undertake a weight-reducing program without proper medical guidance is a foolish, and often dangerous, thing to do.

It would be pleasant if there were some simple pill which would automatically and safely reduce your weight with no effort on your part. Unfortunately, no such remedy exists. So-called "reducing pills," taken without a physician's advice, are usually valueless and may be dangerous.

One type of pill, for instance, will cause you to lose weight—but only for a day or two! Its action is to remove water from body tissues, thus lowering your weight. But as soon as the water is replaced, the extra pounds are back again.

Another thing to beware of, in an effort to lose weight, is any sort of faddist diet.

A liquid diet may often be just as fattening as a normal one. A diet which concentrates on a particular food, and excludes most other foods, may deprive you of nutritive elements essential to the maintenance of good health.



SEE YOUR DOCTOR. Let him decide whether you should lose weight, how much you should lose, and how quickly. Let him tell you how you can do it without starving yourself, without risking your health. He can recommend a

well-balanced diet. He can advise you about exercise. If he thinks medication will be helpful in your case, follow his instructions about dosage *exactly*. His advice is the only advice you can trust in matters that concern your health.

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NEW TUMOR CLINIC AT TULSA

A new cancer diagnostic and treatment center formally opened March 2, 1948, at St. John's Hospital, Tulsa. The clinic has been developed primarily for the care of indigent cancer patients, but care is also extended to the public under certain conditions.

Organization of this service was instigated through the efforts of a group of Tulsa physicians who many months previously originated and developed a working plan. The program is financed by the Oklahoma Division of the American Cancer Society and federal funds administered through the Oklahoma State Department of Health.

It is anticipated that approval by the American College of Surgeons of the clinic's standards will be forthcoming in the near future. The clinic has been organized with consideration of the recommended plan of the college and its approval requested.

General direction of the tumor clinic is charged to an executive committee. Ralph A. McGill, M.D., is current director and other members are: John E. McDonald, M.D., treasurer; Homer A. Ruprecht, M.D., internal medicine; D. L. Garrett, M.D., surgery; Emil E. Palik, M.D., pathology; and Lucien Pascucci, M.D., radiology. Miss Lois Taylor serves both as secretary and social service representative.

Tumor clinic medical personnel consists of regular Tulsa hospital staffs as approved by A.C.S., to include consulting specialists in all fields of medicine and surgery.

Complete x-ray diagnostic therapy facility, radium, pathological and pharmaceutical laboratory service and nursing service is a part of the clinic. St. John's hospital has the special types of radiological facility needed for the clinical operation.

At the present time the tumor clinic operates only on Tuesday mornings. All patients must be referred by a physician. Indigent patients are cleared through the Tulsa Medical Clinic. Indigent service is free but fees are charged private patients. Complete diagnostic examinations are offered private patients and reports of findings are given to the physicians of private patients and treatment arrangements subsequently established.

It is anticipated that the tumor clinic will not only serve as an excellent diagnostic and treatment facility but will also allow continuing study and research for the physicians serving as members of the medical staff.

COURSE WELL ATTENDED

The members of the staff of the department of pediatrics at the University of Oklahoma School of Medicine have begun planning a three-day course to be held December 6, 7 and 8, 1948, because the course that closed March 24 was so well attended. Forty-eight physicians from 27 counties of the state were enrolled.

Herbert A. Higgins, M.D., who has been in practice at Ardmore for 53 years was the "youngest" man attending the sessions. Waldo E. Nelson, M.D., professor of pediatrics, Temple University School of Medicine,

and Myron E. Wegman, M.D., professor of pediatrics, Louisiana State University, were guest speakers. In addition, the following members of the department of pediatrics at the school of medicine contributed to the program: Clark H. Hall, M.D., chairman; Charles W. Freeman, M.D., George H. Garrison, M.D., Bela Halpert, M.D. (professor of clinical pathology), Ben H. Nicholson, M.D., James B. Snow, M.D., and Henry B. Streng, M.D.

ERRATUM

The last issue of the Journal (April '48) erroneously listed in the Annual Audit Report. (Exhibit "C"—"Operating Statement") an incorrect allocation of salary expenses. Salary—Associate Secretary, should have been listed as \$3,350.00 instead of \$5,620.00. The office salaries correctly total \$6,326.98 instead of \$4,056.98. Total expense figures remain unchanged—allocation of expense charges were reported in error.

SEVENTH CIRCUIT OPENS IN GYNECOLOGY COURSE

More than 50 physicians have enrolled in the postgraduate course in gynecology now in progress in the seventh circuit—Anadarko, Elk City, Mangum, Altus and Hobart.

Excellent attendance was reported in the sixth circuit, which closed May 7. J. R. B. Branch, M.D., instructor for the postgraduate course in gynecology, will continue to live in Lawton and commute to the various teaching centers.

Postgraduate courses are held in Anadarko on Monday with Edward T. Cook, M.D., clinic chairman; Elk City Tuesday, E. S. Kirkpatrick, M.D., chairman; Mangum Wednesday, Dwight Pierson, M.D., chairman; Altus Thursday, James E. Ensey, M.D., chairman; and Hobart Friday, J. William Finch, M.D., chairman.

Chairman of the Oklahoma State Medical Association committee on postgraduate education is Gregory E. Stanbro, M.D., Oklahoma City. Dr. Stanbro conferred with the Commonwealth Fund in New York City in April concerning financial aid for courses during the next two years. It is hoped that a course in internal medicine can be offered next.

ARTISTS' ENTRIES DUE

All entries must reach Chicago between May 1 and June 12 for the exhibit at the Chicago Exhibition (American Medical Association, June 21-25). Now is the time to obtain entry blanks, rules, shipping labels, etc., and for details, write airmail to Francis H. Redewill, M.D., Secretary, American Physicians Art Association, Flood Building, San Francisco, Calif.

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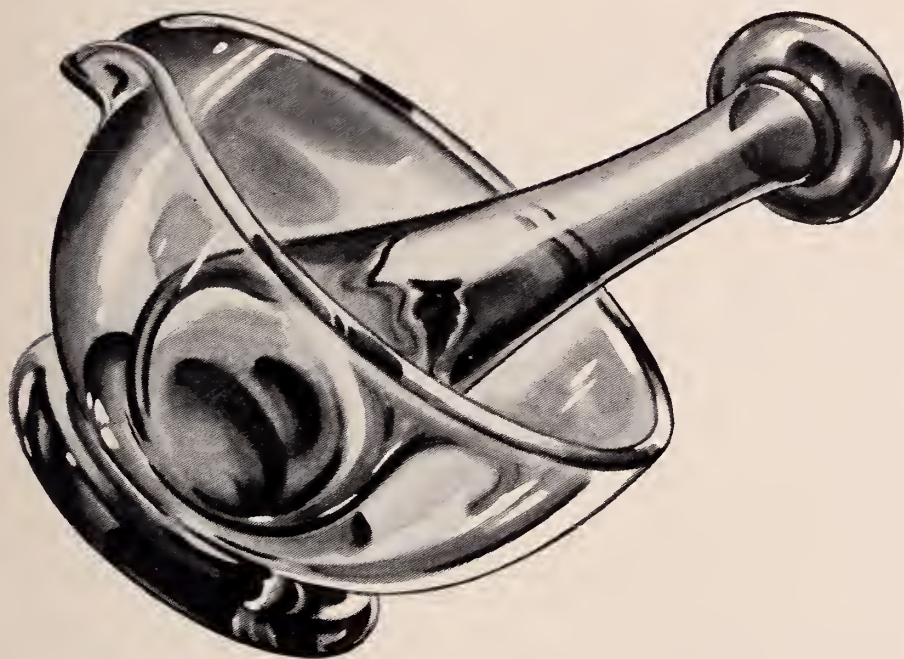
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PRESIDENT

ANNOUNCEMENTS

SOUTHERN PEDIATRIC SEMINAR SLATED

The 28th annual session of the Southern Pediatric Seminar will be held at Saluda, North Carolina, July 5-17. Faculty includes J. M. Arena, M.D., Durham, North Carolina; Mylnor W. Beach, M.D., Charleston, South Car.; Lee Bivings, M.D., Atlanta, Ga.; Amost Christy, M.D., Nashville, Tenn.; Wilbert C. Davison, M.D., Durham, North Car.; W. L. Funkhouser, M.D., Atlanta, Ga.; Luther Holloway, M.D., Jacksonville, Fla.; George D. Johnson, M.D., Spartanburg, South Car.; Hughes Kennedy, M.D., Birmingham, Ala.; Robert Lawson, M.D., Winston-Salem, N. Car.; Kenneth M. Lynch, Charleston, S. Car.; O. L. Miller, M.D., Charlotte, N. Car.; Oren Moore, M.D., Charlotte, N. Car.; Philips Mulherin, M.D., Augusta, Ga.; Angus McBryde, M.D., Durham, N. Car.; Ambrose McGee, M.D., Richmond, Va.; Robert McKay, M.D., Charlotte, N. Car.; R. M. Pollitzer, M.D., Greenville, S. Car.; Julian P. Price, M.D., Florence, S. Car.; Warren Quillian, M.D., Coral Gables, Fla.; Samuel F. Ravenel, M.D., Greensboro, N. Car.; Frank H. Richardson, M.D., Black Mountain, N. Car.; Hines Roberts, M.D., Atlanta, Ga.; Keitt H. Smith, M.D., Greenville, S. Car.; D. Lesesne Smith, Jr., M.D., Spartanburg, S. Car.; J. LaBruce Ward, M.D., Asheville, N. Car.; William Weston, Jr. M.D., Columbia, S. Car.; J. Warren White, M.D., Greenville, S. Car.; George Wilkinson, M.D., Greenville, S. Car.; and Owen H. Wilson, M.D., Nashville, Tenn.

POSTGRADUATE COURSES TO BE GIVEN IN CHICAGO

The Chicago Medical Society is offering physicians two postgraduate courses in September. A course in hematology and neurology will be given September 13-18 and another in cardiovascular and respiratory diseases will be given September 20-25. Information can be obtained from the society's office at 30 North Michigan Ave., Chicago 2, Ill.

PSYCHIATRIC MEETING TO BE IN WASHINGTON

Psychiatric developments in the treatment of mental diseases—in the Veterans Administration, state institutions, general hospitals, and in home, school and job adjustments in the community are included in the comprehensive program planned for the 104th annual meeting of the American Psychiatric Association, to be held Monday, May 17, through Thursday, May 20 at the Statler Hotel in Washington, D. C.

DATES SET FOR ROCKY MOUNTAIN CANCER CONFERENCE

Dates have been set for the second Rocky Mountain Cancer Conference to be held in Denver July 14 and 15. Speakers on the colon and rectum, urinary tract, gastrointestinal, brain and nervous system, bone, lung, isotopes, esophagus, laboratory diagnosis and general practice have been assigned to the program. The conference is sponsored by the Colorado State Medical Society, Rocky Mountain Cancer Foundation, and Colorado division, American Cancer Society. There is no registration fee.

MEDICAL SCHOOL

CALENDAR — MAY, 1948

SURGICAL PATHOLOGIC CONFERENCES—Each Tuesday 11:00 A.M. to 12:00 Noon.

MEDICAL CONFERENCES—Each Wednesday 9:00 A.M. to 10:00 A.M.

CLINICAL PATHOLOGIC CONFERENCES—Each Thursday 11:00 A.M. to 12:00 Noon.

TUMOR CLINICS AND CONFERENCES—First and Third Tuesday (May 4 and 18) 8:00 A.M. to 9:00 A.M.

UROLOGICAL PATHOLOGIC CONFERENCE—Second Tuesday (May 11) 8:00 A.M. to 9:00 A.M.

ORTHOPEDIC PATHOLOGICAL CONFERENCE—Last Tuesday (May 25) 8:00 A.M. to 9:00 A.M.

MONTHLY STAFF MEETING—Second Friday (May 14) Dinner, 6:15 P.M.

RADIOLOGIC CONFERENCE—Fourth Monday (May 24) 6:45 P.M. to 7:30 P.M.

Dr. Jess Miller (Med '47), now interning at St. Luke's Hospital in Chicago, was a recent visitor to the Medical School.

Dr. Grady Ryan (Med '47) visited the Medical School recently. Dr. Ryan is interning at the Jefferson Davis Hospital, Houston, Texas.

Dr. Willard L. McGraw (Med '44) has been released from the Army. He served for two years, and was recently stationed at Craig Field, Selma, Ala.

Dr. John A. Rollow, III, (Med '43) has completed a residency at Wesley Hospital, Oklahoma City, and is now living in Bentonville, Arkansas.

Dr. Jack Paul Birge (Med '31) is now practicing in Alice, Texas.

Dr. R. P. Holt (Med '3) is now with the Oklahoma City Clinic.

Dr. V. F. Forester (Med '44) was a recent visitor to the Medical School.

Dr. Wayne Hull (Med '32) was visiting in Oklahoma City. He is now located at Omaha, Nebraska.

Dr. Gibson Parrish and Pamela Parrish, both in the class of '44, are now completing residencies in medicine at the Wesley Memorial Hospital in Chicago.

VETERANS' RECORDS AID RESEARCH

Medical records of more than 100,000 ill and disabled World War II veterans will be used to aid researchers in their efforts to discover the causes and cures of little-known diseases and unusual injuries, Paul B. Magnuson, M.D., chief medical director of Veterans Administration, announced. Object of the program is to analyze the medical records of such veterans, and through study of the history of their ailments and of the medical treatment given, thus attempt to arrive at sound medical conclusions and recommendations for the care of others who might incur these same disabilities.

MEETING SCHEDULED

Annual conference of the American Physiotherapy Association will be held at the LaSalle Hotel, Chicago, May 23-28.



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BOOK REVIEWS

GIFFORD'S TEXTBOOK OF OPHTHALMOLOGY.

Fourth Edition. Francis H. Adler, M.D. 512 pages. Philadelphia and London: W. B. Saunders Company, 1947.

The purpose of this book is to be of value to the medical student and to the physician not specializing in ophthalmology and Dr. Adler has carried it out well. He has presented only that part of the subject which every physician will find of value, but has given sufficient references for a general review.

The technics of refraction and operations have been considerably condensed. An orientation in various surgical procedures is given in a separate chapter. The chapter on refraction seems too condensed. He states that refraction under 12 years of age should be done with atropine as a cycloplegic. This would make quite an inconvenience to those in school.

He sanely discussed cataract and I wish to quote: "A cataract is an opacification of the lens or its capsule. By this definition, almost everyone has cataracts in the sense that fine opacities are usually visible with the slit lamp in every adult lens. It is wise, therefore, especially in speaking to patients, to restrict the use of the term 'cataract' to opacities of the lens that materially interfere with vision. Even in the early stages of cataract, when vision is somewhat interfered with, it is probably wiser to tell the patient that he has lens opacities, rather than use the term cataract. If he asks whether this means that he has cataracts, he can be told that many times such lens opacities do not progress but remain stationary and occasionally even absorb. On the other hand, if they do progress and cut down his vision further, then cataracts will develop. This is wise, for some patients go the rest of their lives with slight impairment of vision due to early cataracts that never increase to the point of requiring an operation.

"No form of local or general treatment is known to have any effect whatsoever in stopping the progress of senile cataract, or in clearing lens opacities which have been formed. The only known treatment for cataract is operation. This is indicated whenever the reduction of vision, incorrectable with lenses, interferes with the patient's normal activities.

"It is no longer necessary to wait until the cataract becomes mature."

Special emphasis has been laid upon the relation of the eye to general medical and neurological conditions.

The book is beautifully written, well illustrated, and the format is good.—James R. Reed, M.D.

PSYCHIATRY FOR THE PEDIATRICIAN. Hale F. Shirley, M.D. New York: The Commonwealth Fund, 1948. 422 pages. Price \$4.50.

Increasing consciousness of the influence of mind over body and of environment over mind and body makes this practical discussion of child psychiatry doubly important. The author has designed the book for the pediatrician, the general practitioner, the intern, the nurse and the intelligent parent. He stresses the need of bare fundamentals and frankly states that for the sake of brevity he has omitted many details which would be of interest to the specialist striving after understandable simplicity; high sounding psychiatric language has been avoided.

A glossary is appended to help the uninformed reader to understand the necessary technical words. The following intriguing subjects are discussed: Basic Concepts in Child Guidance, Development and Habit Training,

Physical Factors and Problems, Intellectual Factors and Problems, Emotional Factors and Problems, Sexual Factors and Problems, Environmental Factors and Problems, Investigation of Behavior Problems, Treatment of Behavior Problems, and Mental Health in a Changing World.

The clear, comprehensive discussions of the varied subjects and problems are supplemented with illuminating case reports. The pediatrician should know as a composite whole, the child committed to his care. But, most of all, the mother should know the significance of environment and the child's reactions, mental, moral and physical.

One cannot read any part of this interesting book without acquiring a consciousness of the fact that the overall pattern must take into account all the hereditary and environmental factors. Obviously, this necessity poses intricate problems, often difficult of solution. The pleasing format, good paper and clean print are well supported by a lucid, stimulating style, often enlivened with striking, pertinent expressions and a fine sense of humor. The book fills a crying need and deserves a wide reading.—Lewis J. Moorman, M.D.

TREATMENT IN GENERAL PRACTICE. Harry Beckman, M.D., Professor of Pharmacology, Marquette University School of Medicine, Milwaukee, Wisconsin. Cloth, 6th Edition, 1129 pages, W. B. Saunders Company, Philadelphia, 1948.

This book was first published in 1930 and the fact that this is the sixth edition attests its popularity. The subject material is presented in the manner of the previous editions, i.e., each disease is first discussed briefly but adequately and then the various forms of therapy are listed and thoroughly detailed. When there is more than one form of treatment or when there is a controversy, all of the accepted or popular ideas are presented and then the author correlates these and gives his own views. The book is filled with numerous references to the various physicians who are largely responsible for any particular method of therapy listed and a detailed bibliography is added which makes an excellent reference.

The lessons learned in World War II are incorporated in the discussion and all of the latest drugs such as streptomycin and folic acid are included. Many of the subjects, of necessity, have been completely rewritten in bringing this revision for the sixth edition up to date. In addition, the following entities are included for the first time: Balantidiasis, Coccidiosis, Colorado Tick Fever, Creeping Eruption, Geotrichosis, Listerellosis, Loeffler's Syndrome, Management of Penicillin Reactions, Melioidosis, Mite Infestation, Moniliasis, Newly Differentiated Anemias, Non-Meningococcal Meningitides, North Queensland Tick Typhus, Pulmonary Aspergillosis, Reiter's Syndrome, Rickettsiops, Thrombosis and Embolism.

It is the reviewer's opinion that if the physician has just one "treatment" book in his armamentarium—this should be it.—J. W. Morrison, M.D.

HOSPITAL OFFICIAL NAMED

Appointment of Charles T. Dolezal, M.D., superintendent of City Hospital of Cleveland, as assistant director and secretary of the Council on Professional Practice of the American Hospital Association, has been announced by George Bugbee, executive director. He will fill the position left vacant with the resignation of Hugo V. Hullerman, M.D.

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OBITUARIES

E. J. Boling, M.D. 1869-1948

E. J. Boling, M.D., 79, died March 29 in an Enid hospital following a long illness. He had practiced in Billings, Okla., since 1915 and was a native of Illinois. He attended school in Kansas City, Mo., and Chicago and was a graduate of Memphis medical college. Survivors include his widow, one daughter and a nephew.

R. P. Dickey, M.D. 1873-1948

R. P. Dickey, M.D., pioneer Bryan county physician, died in a Sherman, Texas, hospital after a three weeks' illness.

Surviving are his widow, two sons, two daughters, two sisters and one brother.

Robert Hal Gingles, M.D. 1906-1948

Robert Hall Gingles, M.D., Chickasha, died March 21 in Walter Reed Hospital, Washington, D. C.

He had been seriously ill for seven months following the return of an injury he received while stationed at

Selman Field, La. He is survived by his widow and son, one brother, and two sisters.

J. R. Stiewig, M.D. 1872-1948

J. R. Stiewig, M.D., Kiowa, died the first of March following a paralytic stroke suffered several weeks before. He had practiced medicine in that section of Oklahoma for 44 years.

Dr. Stiewig is survived by three daughters, three sons, three sisters, two brothers and three grandchildren.

Reed Wolfe, M.D. 1885-1948

Reed Wolfe, M.D., Hugo, died in a Paris, Texas, hospital following an illness of several weeks. A veteran of World War I, at the time of his death he was president of the Choctaw County Medical Society, a position he had held for the past two years.

He is survived by his widow, one son, H. D. Wolfe, M.D., who was engaged in the practice of medicine with his father, a brother and two sisters.

25 YEARS AGO

(Editorial Notes—Personal and General)

Dr. and Mrs. Carey W. Townsend, Oklahoma City, visited San Antonio in March.

Dr. O. J. Colwick, Durant, has been appointed on the State Board of Medical Examiners.

Dr. C. M. Maupin, Waurika, has been appointed surgeon for the Wichita Falls and Oklahoma railroad.

Dr. V. C. Tisdal, Elk City, laid aside his professional work long enough to be a boy again, when, in company with several friends he indulged in an old fashioned fox hunt near Coalgate.

Kay County physicians held a meeting at Blackwell

April 17. The out-of-town guest of honor and principal speaker of the occasion was Dr. L. J. Moorman, Oklahoma City. A dinner was a part of the "entertainment" always finding the doctor thoroughly at home.

National Hospital day, May 12, will be observed throughout Oklahoma, according to Dr. Fred S. Clinton, State Chairman. He has announced the following committee to stimulate interest in the work:

Dr. A. L. Blesh, Dr. John W. Riley and Dr. LeRoy Long, Oklahoma City; Dr. Hugh Scott, Dr. Claude Thompson, Dr. H. T. Ballantine and Dr. Will Patton Fite, Muskogee; Dr. McLain Rogers, Clinton; Dr. A. S. Risser, Blackwell; Dr. Walter Hardy, Ardmore; Dr. T. M. Aderhold, El Reno; and Dr. Frank W. McGregor, Mangum.

EYELID DERMATITIS

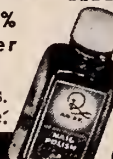
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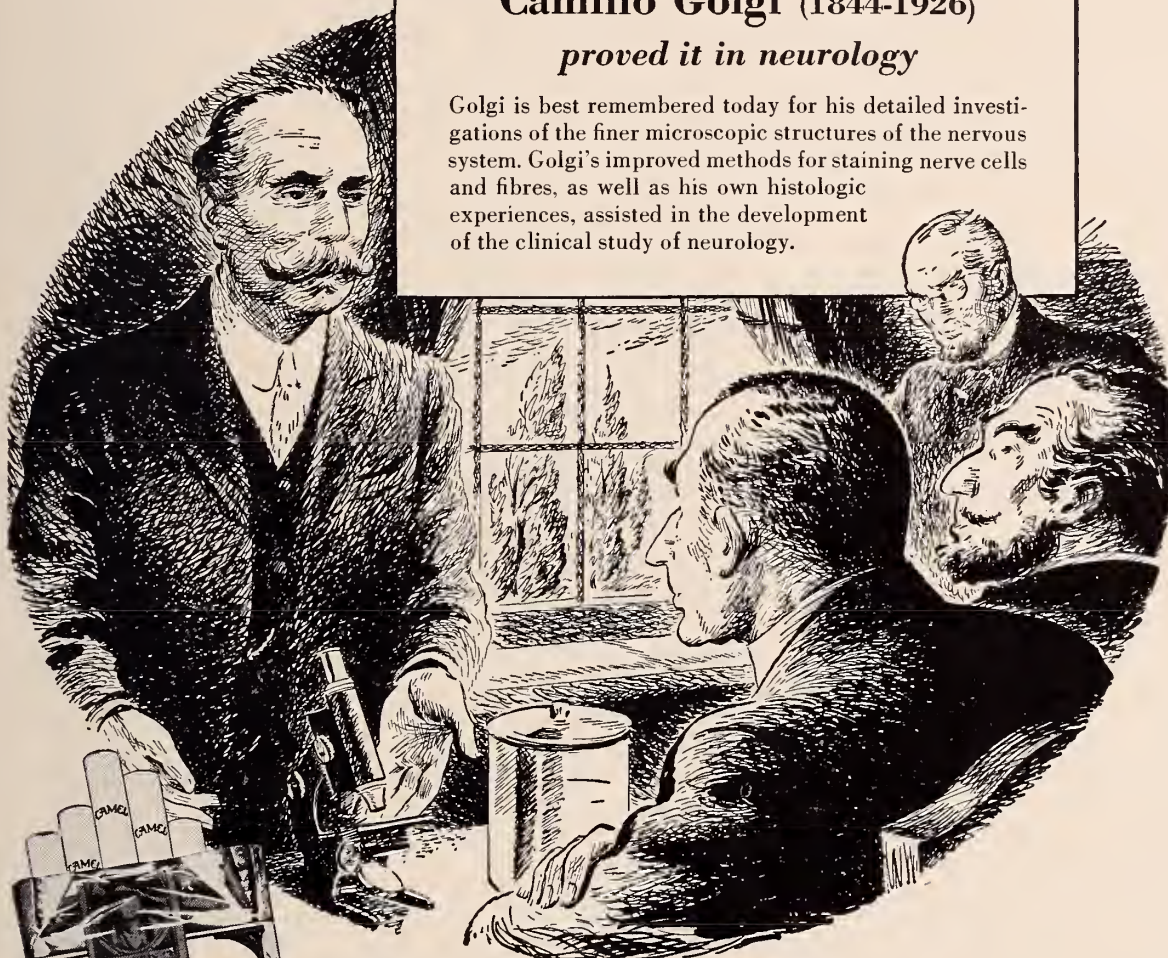
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HAVE YOU HEARD

Roy L. Fisher, M.D., and George A. Tallant, M.D., both of Frederick, have announced the creation of a partnership for ownership and operation of the Frederick Clinic Hospital. All the physicians of Frederick will office with Dr. Fisher and Dr. Tallant. By minor remodeling, the two owners of the Frederick Hospital said, a 28 bed capacity can be created. Latest type equipment and facilities will be available.

P. H. Anderson, M.D., Anadarko physician for more than 30 years has retired from his practice and from his position as acting Caddo county health director. Dr. and Mrs. Anderson will make their home at Forsyth, Mo.

Ray Lindsay, M.D., Don Wilson, M.D., J. A. Graham, M.D., and J. N. Byrd, M.D., all of Pauls Valley, have recently purchased and taken possession of the former Holman Hospital and Clinic in Pauls Valley. Earl Hollman, M.D., former owner, is building a new 35 bed hospital in Oklahoma City.

D. B. Collins, M.D., Waurika, will leave soon for Lawton where he and Mrs. Collins will make their home. *H. B. Collins, M.D.,* Dr. Collins' son, and his family also live in Lawton.

Stanley Childers, M.D., is now a member of the staff of the Veterans Hospital, Muskogee. Dr. Childers is the son of J. E. Childers, M.D., Tipton.

B. Wright Shelton, M.D., and Glenn W. Cosby, M.D., have recently opened a new clinic at Miami.

Mark Holcomb, M.D., Enid, has been promoted from major to lieutenant colonel in the medical reserve.

R. G. Obermiller, M.D., Enid, has recently moved into his new clinic building in Enid. Many pieces of new equipment have been installed and the building includes treatment rooms, consultation rooms, laboratory, "baby" room, emergency and x-ray rooms.

O. H. Cowart, M.D., Bristow, is another member of the O.S.M.A. who has recently constructed a new modern clinic in his city. The new clinic will handle rectal and surgical cases while the regular practice patients will continue to call at the present office in the Cowart-Sisler hospital.

O. E. Templin, M.D., has reopened his office in Alva. He was named director of a five-county health unit with headquarters in Tahlequah last fall but ill health forced him to resign that position and return to Alva.

McLain Rogers, M.D., Clinton, was re-elected mayor of his city when the Clinton city election was held in April.

C. W. Ohl, M.D., and Rene Gerard, M.D., Chickasha, have recently purchased the Cottage hospital and changed the name to the Women's and Children's Hospital. L. E. Emanuel, M.D., Chickasha, was formerly the owner of the Cottage Hospital. Dr. Ohl has been practicing in Chickasha since 1938 and served in the armed forces six years. Dr. Gerard is the son of Dr. G. R. Gerard, Chickasha, and is a graduate of the University of Oklahoma School of Medicine. Both are specialists in obstetrics and gynecology.

RESOLUTION

WHEREAS, Dr. D. W. Darwin has announced his intention to retire from the practice of medicine in Woodward, Oklahoma, and move to Denver, Colorado, and

WHEREAS, Dr. Darwin has, for the past eighteen years, been a respected citizen and leader in the medical profession in Woodward and in the State of Oklahoma and has been an active and valued member of the Northwestern Medical Society, having served as its President, and,

WHEREAS, it is with great regret that the announcement of his removal from the community is received and the Northwestern Medical Society desires to express its appreciation for his progressive, sterling character and professional standing in the community.

NOW, THEREFORE, BE IT RESOLVED by the Northwestern Medical Society, in regular session assembled on this 11th day of March, 1948, that it greatly regrets the leaving of Dr. Darwin from Woodward, Oklahoma.

BE IT FURTHER RESOLVED by said Society that it hereby expresses its deep appreciation for the efforts of Dr. Darwin in promoting the medical profession during his stay in Woodward, Oklahoma.

BE IT FURTHER RESOLVED that the Secretary spread the Resolution upon the records and furnish one copy to Dr. D. W. Darwin and that a copy thereof be sent to the State Medical Association.

Approved: April 8, 1948.

MEDICAL SOCIETIES AROUND THE STATE

Garfield County

Arthur A. Hellbaum, M.D., associate dean of the Oklahoma university school of medicine, spoke on "Protein Metabolism and Fluid Balance" at a meeting of the Garfield County Medical Society. The Garfield County Society has also set up a disaster committee which has procured and provided two emergency boxes filled with penicillin, bandages, splints, plaster of paris and other medical needs. Ready to go on a second's notice, the boxes cost approximately \$200 apiece.

Comanche County

Committees to offer public services will be appointed soon by the Comanche County Medical Society following a recent meeting when the expanded program was outlined for the society. Fourteen members attended the March meeting.

Muskogee-Sequoyah-Wagoner

The Muskogee-Sequoyah-Wagoner Medical Society is sponsoring its second annual essay contest with \$30 in prizes to be offered. Subject of the contest essay is "Why the private practice of medicine furnishes this county with the finest medical care." All junior and senior highschool students are eligible to enter.

Grady County

Floyd Keller, M.D., Oklahoma City, was guest speaker at the March meeting of the Grady County Medical Society.

Tulsa County

A scientific meeting of the Tulsa County Medical Society was held March 22 when a symposium, "Tumors of the Gastro-Intestinal Tract," was presented. Speakers were Benjamin W. Ward, M.D., Simon Pollack, M.D., and J. D. Shipp, M.D.

McIntosh County

J. Howard Baker, Jr., M.D., was installed as president of the McIntosh County Medical Association at a recent meeting. Raymond W. Stoner, M.D., is vice-president and W. A. Tolleson, M.D., is treasurer.

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Professor Genito-urinary Surgery, Rush
Medical.

ALTON OCHSNER, M.D., Professor and
Director of Surgery, Tulane.

JOHN H. LAWRENCE, M.D., Chairman,
Division of Medical Physics, University of
California

ALFRED W. ADSON, M.D., Senior Surgeon,
Mayo Clinic.

JOHN W. BUDD, M.D., Pathologist, Los
Angeles Tumor Clinic.

FRED W. RANKIN, M.D., Clinical Professor
of Surgery, Louisville.

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Cancer Institute, Bethesda.

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THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

THE UNHEEDED WARNING

According to an editorial in the Daily Oklahoman of April 26 "Count Von Bernstorff, the kaiser's ambassador to the United States in 1914, laughed at our so-called "progressive" politics as being "made in Germany." In an interview published in The Washington Star that year he also made the further observations:

"Your 'progressive' politics are the reflection of the sort of state socialism which Bismark established as a concession to the great number of followers of Karl Marx, then existing, when he was molding the German empire back in 1870.

"You educators do undergraduate or post-graduate work in our German universities and come back chock full of conceptions of social justice, the beauties of bureaucracy, the efficiency of our system of government, and the high social and official positions accorded the pedagogues. As a matter of fact, our government is not as efficient as most people think. No government ever is. It gets by because the German people are an obedient people, accustomed to regimentation."

"Then he got in a final warning and horse laugh when he added: You have adopted an income tax law in congress. That is the beginning. You will soon have more and more burdensome ones. Now you don't know a thing about the burdens of taxes. We in Europe know. But what amazes me is that your people seem so intent on following our example instead of developing the system provided by your constitution. Wait a few years and see the results!"

If those who read this will turn to the editorial columns of the Journal of the Oklahoma State Medical Association they will find that in July, 1943, this warning for the benefit of the people and the medical profession, was sounded under the title "From Bismarck to Beveridge Plus Wagner and Murray." Perhaps this was before the bill was set to music with the gay lilt of Dingle. Though the latter ardently sings the virtues of socialized medicine he has been known to travel all the way from congress to Colorado

to have his private physician check the phthisic in his chest.

How hard the lessons; how slowly we learn; how high the price!

WORLD HEALTH ORGANIZATION

Those who did not see the editorial in the Journal of the American Medical Association April 3 issue will be interested to know that the function of the United States in international public health was dealt a serious blow when the "Rules Committee of the House of Representatives tabled a bill to ratify the constitution and the WHO and to make the United States a member of that body."

More than any other nation our mechanized, transportation-minded, globe-trotting United States has converted the hoary old sphere into One World. After bringing all nations together with their varied diseases, shall we refuse to participate in this organization designed to safeguard the health of all and to protect each nation from the communicable diseases of all the other nations. Since the establishment of WHO on a sound basis would help to secure the health of the United States and since its objectives are among the few non-controversial proposals considered by the United Nations and since we had an important part in the organization of the International Health Congress out of which grew the present world organization, our failure to cooperate is difficult to understand.

RESEARCH IN OKLAHOMA

The Oklahoma Medical Research Foundation is assured. The campaign for funds cannot fail. The building program is in the hopper. The medical and allied professions have every reason to be proud of the fact they were privileged to initiate this unified, humanitarian movement on a comprehensive scale unheard of before. Those who have not participated in this worthy cause should do so now. Though personal giving has been purely on an unselfish plane, those who have contributed have, perhaps, unwittingly perpetuated their names.

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COMPULSORY HEALTH INSURANCE*

The National Industrial Conference Board has published a revealing compendium on this subject resulting from the experience and research of Dr. Elizabeth W. Wilson, one of America's best known actuaries.

Dr. Wilson's father was a prominent Washington physician standing high in the councils of the District of Columbia Medical Society. She grew up in the shadow of the seat of government to become a skilled mathematician, a meticulous statistician and a widely sought consultant in actuarial fields. Her qualifications for a sound discussion on the subject of compulsory health insurance are supplemented by one time service as associate actuarial statistician of the Social Security board.

The author gives the history of our government projects in this field and shows their intimate relationship to the Bismarckian pattern. She poses the administrative problems, discusses the medical and economic implications and the political potentialities. She closes with the pros and cons of compulsory health insurance.

This booklet should be read by every physician and made available to every American who reads and it should be relayed to the illiterate. After the late hearings on S-1606, Senator Pepper, chairman of the subcommittee for the survey of health insurance, released a statement (referred to below as the Subcommittee report), which purported to be a summarization of the hearings. Actually it epitomizes the main arguments of the proponents.

A reference note indicates that this report was really "a two-year study made by the subcommittee, and was ready for distribution in March, before the hearings began (*Christian Science Monitor*, July 27, 1946.) Of the subcommittee, Senator La Follette writes (*Colliers*, February 8, 1947, p. 22) that it was infiltrated by fellow travelers. He speaks of the report's being released under "highly irregular procedure." It was signed, for instance, by only four of the nine members of the subcommittee (*Christian Science Monitor*, August 5, 1946), and Senator Aiken, one of the four, had not authorized the use of his name to indorse any specific legislation (*ibid.*, July 27, 1946.)

This shows that the taxpayers footed the bill for a one-sided report and without subsidy the NICB had to pay for the truth. Those who are wavering and wondering if it may be well to acquiesce should remember

that according to Gracian "the squeezed orange falls from a golden salver into the dung." God forbid!

*Copies of this study may be obtained from The Conference Board, sending charges prepaid, at \$1.00 a copy.

PATIENT-PHYSICIAN-HOSPITAL PROBLEMS

The increasing demand for hospital care in spite of mounting costs poses a number of serious questions. Patients have become hospital minded because of hospital insurance, popular health education and the prevailing impression that the hospital is the physician workshop. The paucity of general practitioners and the dwindling patient-doctor relationship send many unanchored patients to the hospital. Under the influence of these varied factors many patients who might be adequately treated in the home are admitted to hospitals. Some patients justly in need of hospitalization remain longer than necessary because of hospital insurance or because the servant question has become so acute it is impossible to arrange care at home.

Though the cost of hospitalization has doubled in the past few years and the financial strain upon low and moderate income groups is tremendous the demand for beds is pressing.

The cost of hospitalization, medical care, nursing and medication is driving many people toward the promises of socialized medicine. They find it difficult to realize that in the last analysis they will pay more than they are paying now. Those who doubt should check civilian hospital costs with the cost of VA hospitalization.

It is time for a careful survey to determine patient-physician-hospital needs. The main objectives should be the speeding of turnover, the elimination of unnecessary patients, the study of hospital insurance with the hope of more adequate coverage, the possibility of reducing costs and the advisability of nursing or rest homes for patients not in need of expensive hospital services and for the purpose of speeding the hospital turnover. Such rest homes could be manned by nurses' aids working under registered nurse supervisors.

It behooves the physicians to become interested in these pressing problems. It seems that some solution is imperative if we would escape governmental control.

WHEN PROCRASTINATION IS DAMNABLE

The State Office is being assailed by complaints that while D.O. has been added to "osteopathic physicians" signs, M.D. is still wanting on the signs of many medical physicians.

There is not a sign painter in the State Office, but there is a pen. The latter is now being pushed in the direction of those who have failed to comply with the law. If you stand for the integrity of your profession and the welfare of your patients, call a sign painter, or perhaps better, the manager of your building, if you suffer the misfortune of being a city doctor. Perhaps through concerted effort, building managers could be induced to make the necessary changes or additions at a small per capita cost.

Which do you prefer, paint or repeal? Time is passing, don't procrastinate.

FORESIGHT

In the April Bulletin of the Garfield County Medical Society, we find an editorial by Raymond G. Jacobs "All Set for Disaster." Every county and district medical society should give serious consideration to the theme of this editorial.

It reports that Garfield County Medical Society has organized its membership, laid its plans for emergencies and received financial aid from the American Red Cross to assure swift execution wherever catastrophe strikes in the county or adjacent communities.

The following pertinent paragraphs are lifted from the body of the editorial:

"The plan, as organized, will consist of groups of three or four doctors and nurses, with sufficient supplies, ready to leave immediately for the scene of a disaster and to continue this help until it is no longer necessary.

"These groups of doctors and nurses will work possibly six or eight hour shifts, to be followed by new and fresher groups. This sequence will be maintained as long as the situation requires. Naturally we are hoping we are never needed, but disaster can come from cyclones, tornadoes and fires at any time and in this age of atom fission, explosions, etc., anything can happen."

THE PATIENT-PHYSICIAN RELATIONSHIP

This relationship championed by the Hippocratic Oath and supported by the Great Physician and his faithful follower Luke

could be improved in this exigent age by giving the patient more time. The bedside is his battle ground and the doctor is his commanding officer. He not only expects orders but he has a right to demand leadership. He is willing to conform to necessary diagnostic and laboratory techniques and therapeutic strategies but primarily he is interested in prognosis. What he wants is victory over his affliction and to that end he will invest the last spark of mental and physical energy. He longs for the opportunity and the know-how.

Often the doctor seems not to realize that he has been prepared by an exacting education and accumulated experience for the bedside conference which as a rule finds the patient wholly unprepared. Suddenly the latter comes face to face with problems which to him may seem catastrophic regardless of their significance. They are beyond his comprehension. He craves confidence and sympathetic understanding. While laboratory procedures and to him inexplicable therapeutic measures are underway he would like for his physician to initiate some tests in the laboratory of the soul. Time spent by the physician in an effort to penetrate fallow spots beneath the patient's calvarium is never lost. Even though the patient seems to be unresponsive and irresponsible (a rare experience) the time is still well spent. If sympathetic conferences explaining conditions and what may be expected from treatment does not immediately help the patient, the honest effort chastens the doctor and sends him to his rest with an easy conscience. Often when the patient seems to be heedless, the physician's advice and council may find favorable soil, and may ultimately bear fruit. The best way to defeat the Wagner-Murray-Dingel bill is to be patient with the patient.

YOU AND YOUR DOCTOR

In this issue of the Journal there is a review of a little book under this title by Benjamin F. Miller. While it is hard to believe that any person bearing the title M.D. could line up with the President, Senator Pepper, organized labor, the Social Security Administration officials and other bureaucrats we must face the facts.

The disciples of Bismarck so active in government bureaus, bent upon the destruction of our liberties are occasionally discovered in our own ranks. Here is one! Read the review and purchase the book and build defenses against this evil threat.

SCIENTIFIC ARTICLES

UROLOGY IN GENERAL PRACTICE*

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There is an opinion shared by many members of the medical profession that specialism has been over-employed and probably is a factor in the increased cost of medical care. On the other hand when complicated diagnostic and treatment procedures are indicated they can best be applied by those of adequate training and experience, yet many patients are referred to the specialist when the diagnosis and treatment is not involved. Actually such patients should receive their medical care from the general practitioner. But the laity has been taught that the most efficient medical care can be obtained from the doctor who restricts his work to a particular field. As a consequence many patients who in former years would have had but one doctor to consult, now employ a staff of specialists instead of a single "family practitioner." These patients are bypassing the general practitioner with increased costs and an inferior grade of medical care.

There are probably many factors other than these to explain this misguided emphasis on specialism. In my opinion the present day scheme of medical education contributes much to a weakening confidence in the general practitioner. The student is indoctrinated not only in his pregraduate years but later in his internship and residency almost exclusively by specialists. The majority of his preceptors are interested in the small field of their own specialty and not a few have a tendency to dramatize and even complicate minor phases of diagnosis and treatment to the neophyte. No wonder the young doctor becomes subconsciously imbued with the feeling that only a specialist can render the best treatment. Undoubtedly this practice constitutes one of the reasons why the goal of a high percentage of the medical school graduates should be ultimately a specialty practice.

Urology is not a minor portion of the average practice of the general man. Genitourinary tract signs and symptoms are constantly being encountered in many patients

and must be properly evaluated in the differential diagnosis of various diseases. Cystoscopy and other transurethral procedures are so often over-emphasized in the teaching years that the graduate in his early years of practice feels lost unless these diagnostic aids are available. Actually the larger portion of a private urologic practice may be efficiently handled without complicated cystoscopic equipment. Certainly I do not mean to infer that cystoscopy and pyelography can be dispensed with but I do believe in many instances merely because of availability patients are submitted to these procedures. In teaching institutions oftentimes complicated methods of urologic diagnosis and treatment as demonstrated to the student become in his mind the standard of practice and a fixed concept is engendered that such is the norm for the efficient examination and management of patients.

In the field of urology it may be of interest to detail a few phases of urologic practice that would lend to more elaboration in teaching.

The treatment of most genitourinary tract infections is well within the province of the average practitioner. In acute infections the cystoscope is not indicated. In most instances all that is necessary is the determination of the type of invading organism and the prescribing of the appropriate medication for the eradication of that type of bacteria. Chronic bladder infections, common in women, are often amenable to thorough urinary antisepsis and the judicious use of the urethral sound and silver nitrate instillations.

The infected prostate should qualify for more attention by the general practitioner than it receives. Many patients with chronic asymptomatic prostatitis are shunted to the specialist for whom better treatment could be prescribed by their home practitioner. The majority of these patients require but a minimal amount of active treatment as not a few of them are urologic neurasthenics.

The x-ray is an important element in the diagnosis of urologic disease. The use of the

*Presented before the General Session at the Annual Meeting of the Oklahoma State Medical Association, May 14, 1947.

intravenous urogram has greatly simplified the practice of urology in eliminating many cystoscopic manipulations. It has its admitted limitations but in many instances will provide almost complete information as to the status of the upper urinary tract. Intravenous urography is particularly invaluable in the determination of obstructive uropathy of the upper urinary tract. The position, function and motility of the renal pelvis and ureters can be determined with exactitude. The general man should know how to use this invaluable aid for urologic diagnosis. It is a safe procedure and will rule out many questions of urinary tract pathology.

Stone disease of the upper urinary tract is a common ailment encountered in general practice. In many instances it is a disease characterized by recurrences, and neglect in its management accounts for many nephrectomies in later life. The general practitioner should know well the stone problem as it applies to the urinary tract and he should be able to utilize this available knowledge in the prevention of recurrences. Removing a stone is but a detail in calculous disease of the urinary tract; the follow up care is vastly more important.

A proper appreciation of the importance of hematuria should be grounded in the

medical mind of every graduate student. Despite all that has been written and spoken on this subject, hematuria is still a sign too often dismissed by the practitioner as a trivial and unimportant episode. No solution of the cancer problem as it pertains to the urinary tract can be accomplished until the "red flag" of hematuria assumes its proper clinical importance in general practice.

Sexual disturbance in the male is a much neglected phase of urology that in most instances is better managed by the practitioner than the specialist. As the psychogenic element is a strong etiologic factor not only in the production, but the aggravation of impotency and loss of libido, the general practitioner with an insight into the mechanism of these disorders can do much for these distressed patients.

I have cited but a few of the aspects of urologic practice that in my judgment are relatively neglected in general practice. It is necessary in order to make available to a larger portion of the population the benefits of modern medical knowledge, that the general practitioner's field of usefulness should be expanded. Much can be accomplished through his schooling by giving him practical knowledge and confidence to apply that knowledge in behalf of his patients.

DIAGNOSTIC POINTERS IN RHEUMATIC DISEASES

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Quite often it may happen that diagnoses of rheumatic diseases may be easily determined through a knowledge of certain clinical and pathological features that characterize the individual entities. Again, at times, the diagnosis of an arthritic or rheumatic case can be established only after rigid and extended diagnostic investigations have been carried out.

From a clinical standpoint, a careful and detailed history is of the first importance. After a detailed history is taken of the onset and course of the rheumatic symptoms to the time the physician sees the patient, and added to what the individual physician may observe without actual physical examination, often 60 to 80 percent of cases can be tentatively, but rather accurately, diagnosed.

Of course, the physician should not stop with just the taking of the history, even though it is of such extreme importance. A complete physical examination is the next

most important step. It will often confirm initial impressions as to the type of rheumatic disease that the individual has.

Following a physical examination, necessary and indicated x-ray and laboratory tests may be in order, though often such tests are of confirmatory rather than diagnostic value.

From the standpoint of the internist and general practitioner, rheumatic diseases may be arranged into one of six groups.

Keeping in mind the need of a carefully taken present and past history, as well as system review, also the need for a complete physical examination, the following diagnostic points will, when kept in mind in respect to rheumatic diseases, help to establish a diagnosis rather quickly, and with some good degree of accuracy place the case in the proper rheumatic disease group:

(A) Rheumatic cases are caused by specific organisms; such as syphilis, gonorrhea, pneumococcus, tuberculosis, etc.

1. Far too often it is overlooked that a preceding case of gonorrhea may be the cause of an acute polyarticular arthritis attack. Very often Neisserian arthritis will follow by one to several weeks an attack of gonorrhea, and will be of a polyarticular type.

2. Often the initial onset of polyarticular gonorrheal arthritis will focalize later to a single joint—more often the knee joint.

3. When an undulating fever history is present, with exacerbations and remissions, plus the presence of associated joint symptoms, think of Brucellosis.

4. There may be a history of chills followed by fever recurring rather regularly plus associated joint symptoms, in cases exposed to or having developed malaria.

5. If loose stools are present which contain blood and pus, and frequent movements coexist, plus the presence of joint involvements, check on the colon for ulcerative colitis. Approximately one out of 25 cases of ulcerative colitis will have joint involvements.

6. If the history reveals a slow insidious onset in a single joint, quite often of the spine, hip or knee, remember that tuberculosis involvement of the joint should be considered.

7. If petechiae are present with joint involvement plus some fever and possibly some degree of heart disturbance, one should keep in mind that subacute bacterial endocarditis might be present.

8. If there is present joint disease, quite often limited to a single one which is without heat, tenderness or special amount of pain, and if rigid pupils plus lost knee reflexes are noted, the presence of tabes dorsalis with a Charcot joint is usually the diagnosis.

9. During the course of syphilitic treatment, joint pains may develop, especially in the early stages of treatment. One should keep in mind the presence of a Herxheimer reaction.

10. If arsenicals are being given for a case of syphilis, the development of complicating arsenical multiple neuritis may produce joint symptoms of rather marked degree.

11. Pain may be present in or about involved joints or in the spine for quite a period of time, before the x-ray will reveal a metastasis.

12. Joint symptoms—when present—together with a Wassermann test that is posi-

tive, indicate that the articular symptoms, if they do not markedly resemble a definite known type of arthritis, are secondary to syphilis. Syphilis is very protean in its manifestations and the rheumatic symptoms may be one method by which it reveals itself.

13. Articular involvement of rather marked degree, associated with skin rashes that are present in rat bite fever, may be the result of rat bite fever.

14. In the presence of scarlet fever, associated migratory polyarthritis symptoms are often present somewhat similar to what occurs in rheumatic fever.

(B) Rheumatic cases which are probably due to infection, but in which the etiologic agent is not definitely known. Good examples of this are rheumatoid arthritis and rheumatic fever.

(C) Degenerative joint diseases are best exemplified by certain types of chronic osteoarthritis.

1. The three most common rheumatic diseases are chronic osteoarthritis, fibrositis (non-articular rheumatism), and rheumatoid arthritis.

2. The presence of Heberden's nodes serves notice that chronic osteoarthritis is present.

3. The coexistence of osteoarthritis and rheumatoid arthritis occurs not too infrequently and is known as mixed arthritis.

4. Obtaining a history of an inflammatory attack of rheumatism before the age of 15, may help to classify a later episode of rheumatic fever.

5. In an acute polyarthritis attack following in one to five weeks a sore throat or an acute tonsillitis—think of rheumatic fever.

6. Remember that less than 10 percent of patients having rheumatoid arthritis begin with an acute attack—therefore think of rheumatic fever in an acute onset.

7. Always be sure to inquire as to the age of the patient, for osteoarthritis as a rule occurs after the age of 40, while rheumatoid arthritis is usually present between the ages of 20 and 40.

8. When rheumatic joint involvement flits around to various joints every four or five days, without leaving definite sequelae in the temporarily involved joints, consider strongly the presence of rheumatic fever.

9. If adequate doses of salicylate will relieve pain and produce marked improvement of joint involvement in a younger person, again consider the presence of rheumatic fever.

10. If the joints are red, hot, and swollen, as well as very tender, and sweating and fever is present—and in a younger person, think of rheumatic fever. Occasionally, however, rheumatoid arthritis may begin acutely in that manner.

11. Red, hot, and swollen joints, with marked pain that could be confused with rheumatic fever may follow from seven to 21 days the administration of antiserum.

12. Weight loss is usually present in cases of rheumatoid arthritis. On the contrary, osteoarthritis are usually well-nourished, as well as cases of fibrositis.

13. When fusiform spindle shaped swellings are present, especially involving the proximal interphalangeal joints of the fingers, and often symmetrically placed, it usually means rheumatoid arthritis is present.

14. With the presence of subcutaneous nodules, think of rheumatoid arthritis, rheumatic fever, or fibrositis.

15. Rather marked lymphadenopathy may be present in rheumatoid arthritis, especially in the epitrochlear and axillary areas of the body.

16. The presence of muscle atrophy is quite often present in rheumatoid arthritis, but is absent in osteoarthritis.

17. Cold, clammy hands and feet, with a smooth somewhat cyanotic shiny atrophic skin is usually associated with rheumatoid arthritis.

18. It is a truism that fever is not present in uncomplicated degenerative joint disease.

19. The presence of a stiff painful back in a young adult—usually a male—occurring at times with associated involvement of hips or shoulders, plus fleeting rheumatic pains, points to rheumatoid arthritis of the spine, known as Marie-Strumpell spondylitis.

20. The sedimentation rate is elevated in rheumatoid arthritis, but usually normal in osteoarthritis.

21. X-rays of joints are only confirmatory evidence of rheumatoid arthritis. Early in the onset, the x-rays of the joints may be entirely normal or possibly show only mild osteoporosis—therefore, the diagnosis of rheumatoid arthritis without positive x-rays is in order.

22. Rheumatoid arthritis is much more frequent in women.

23. Cloudiness of the sacro-iliac joints and evidence of inflammatory reaction of same on x-ray, in young persons, males usu-

ally, means ankylosing spondylitis or rheumatoid spinal arthritis.

24. Bilateral sacro-iliitis involvement may be present months or years before objective back signs of rheumatoid spinal arthritis are obtained. Therefore, always make an antero-posterior x-ray of the pelvis in a young adult patient, male especially, who has shifting rheumatic pains occurring intermittently for a period of days or weeks.

25. Psoriasis skin lesions may be present with typical rheumatoid arthritis joint signs. This is classified as psoriatic arthritis.

(D) Traumatic joint diseases. Usually the pathology is limited to a single joint, though multiple joints may be involved as a result of acute or chronic traumata, either of marked, or minimal degree.

1. When only one joint is involved, inquire after trauma. The trauma may be on an occupational basis. Trauma causing joint reaction may be on an acute basis, or on a chronic basis. Trauma may be produced acutely in severe degree or there may be trauma in minimal amount year in and year out which eventually produces joint changes.

2. A sciatica syndrome, especially when the ankle reflex is absent, should promptly call for a careful searching history in respect to the possible occurrence of a disk injury. It is a frequent cause of a sciatica syndrome.

3. Faulty posture and backache are often cause and effect.

4. Weak muscles, especially of the body, often cause low back pains.

5. When a patient complains of weak feet or has ptosed arches, or if other structural deformities are present, then as a result of strain caused by such defective anatomical condition, pains may be produced and even objective joint involvement.

6. When a joint suddenly swells in a male who has a history of being a bleeder, and in whom a hereditary background is present, think of hemophilia and intra-articular hemorrhage.

(E) Metabolic dysfunctions: Gout and gouty arthritis—acute or chronic. Quite often acute gout may become—after a long period of time—chronic. It is a metabolic disturbance in the body's ability to handle uric acid.

1. Gout is extremely rare in females.

2. If the history reveals sudden onset of joint pains, often monarticular, plus the presence of redness, swelling and extreme tenderness and persistence of symptoms for several to 14 or 21 days, and recurrences at

first every eight to 18 months, then more often, plus complete clearing and no sequelae in the involved joints, gout should be considered as the cause of the joint disturbance until proved otherwise.

3. The presence of a tophus, either about the ears or about a joint, is a diagnostic sign of gout. It, however, as a rule, occurs late in the course of gout.

4. The presence of an olecranon bursitis points to gout. It should be considered as present until proved otherwise.

5. During an acute attack of arthritis, especially when it happens to be monarticular, if the blood uric acid is elevated, gout is the most usual cause of the joint condition.

6. When regularly recurrent joint swellings are present and happening approximately every seven to 21 days, usually in the same joints—and more often involving the knees, intermittent hydrarthrosis is as a rule the condition present. This is especially true when the onset is abrupt with increasing effusion disappearing in a few days and normal conditions of joints resulting. The condition then is almost certainly that of intermittent hydrarthrosis.

7. When a subperiosteal hemorrhage is present, and a history of dietary deficiency is obtained, think of the need for Vitamin C of the patient having such symptoms. If some degree of gum changes suggestive of scurvy are also present, then the diagnosis is quite in order of a Vitamin C deficiency.

8. When the tongue or mouth give evidence of lack of vitamin factors, especially of the B complex type, and the dietary history reveals the probable presence of a vitamin deficiency, then think of Vitamin B complex deficiency causing the rheumatic symptoms.

9. Often the presence of the above B complex deficiency symptoms will be associated with a diffuse nonpitting swelling of the tissues about the joints, especially in the hands or in the lower extremities. In that case, Vitamin B₁ or thiamine chloride deficiency apparently dominates.

10. Arthralgia and joint swellings as a part of the picture of hypothyroidism is not at all uncommon.

11. If puffiness of the hands or feet or knees is present, plus a dull facial expression, weak reflexes, a slow pulse, hypotension, and a low BMR is obtained, then a diagnosis of hypothyroidism can be made as being the cause of the joint pains. Thyroid

extract is specific for the relief of such condition.

12. Skin manifestations of lupus erythematosus not at all uncommonly have associated joint involvement.

13. The presence of erythema nodosum and joint involvement often may be associated.

14. The skin findings of dermatomyositis will quite regularly be associated with mono- or polyarticular joint changes.

15. Drug intoxications causing skin rashes may also produce associated joint symptoms and signs.

(F) Neurogenic. Neurogenic conditions with associated joint involvement:

1. Syringomyelia with its trophic and pain nerve fiber involvement may produce joint changes in which heat, pain, and tenderness are absent.

2. A myelitis, either transverse or disseminated, may produce as a part of the neurogenic disturbances, non-painful asymptomatic joint involvement.

(G) Fibrositides. Fibrositis, known as non-articular rheumatism. This is a condition which may be either primary or secondary. It affects the fibrous tissues, either of muscles, of joint capsules, tendons, nerves, bursae, etc. The causes back of fibrositis may be infections of acute or chronic type, known or unknown, toxic states, traumata, metabolic disturbances, or psychogenic.

1. An arm that produces pain at the shoulder on elevation and/or inability to cross the forearm behind the back because of pain and motion limitation, usually spells subdeltoid bursitis, one of the fibrositis syndromes.

2. Given the history of an initial shock, the presence of signs and symptoms of conversion hysteria elsewhere, the presence or onset of fibrositis symptoms suggests a diagnosis of psychosomatic rheumatism.

3. Though an x-ray of the shoulder joint is negative, a subdeltoid bursitis diagnosis is in order, as 60 percent or more of such cases do not have bursal calcification to produce x-ray findings.

4. Swellings of the fibrous tissues about the joints, especially when monarticular, with negative x-ray findings, may often spell fibrositis—periarticular type.

5. Muscle spasm, such as wry neck or lumbago, is often due to trauma or to infection of the fibrous tissues surrounding the muscle fibers and is to be classified as fibrositis—either primary or secondary in type.

6. Fibrositis, or involvement of the

fibrous tissues about the joints or of tendons or ligaments, is often secondary to either rheumatoid arthritis or osteoarthritis and is considered a part of the arthritic picture.

7. A peripheral neuralgia which appears

suddenly and apparently as a result of infection and in which neuritis symptoms are absent, is in fact fibrositis—neuralgic in type and caused by involvement of the perineurium.

STREPTOMYCIN: ITS USES IN CHEST CASES*

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PURPOSE

The purpose of this paper is to summarize the findings of the work with streptomycin in chest diseases during the past year and try to give a critical analysis of the same.

ACTION OF STREPTOMYCIN IN THE BODY

Briefly, let us analyze the action of streptomycin in the body and the dosages and administration of it is brought out by authors from the Mayo clinic, the National Research Council, and the Council on Pharmacy and Chemistry.

The order of absorption of streptomycin is as follows: It is absorbed in general circulation, the level in the blood serum reaches a peak in about one-half hour. It is excreted by the kidneys and through the bile. After large amounts, it is found in the cerebrospinal fluid, and also passes through the placenta reaching the foetal circulation in systemic administration. When it is administered orally, little of it reaches the blood stream, and this method of administration is not suitable for use in treatment of infections in general.

From two to three months about 40 percent of patients develop immunity to streptomycin. After four months about 60 percent showed immunity.

DOSAGES AND ADMINISTRATION

When 0.1 Gm. is given intramuscularly every three hours, one can expect that the mean concentration in the blood over a three hour period will be two-three micrograms per cubic centimeter. When 0.2 Gm. is given at the same time interval, the mean concentration will be five-six micrograms per cubic centimeter (minimum three, maximum 10).

For 0.3 Gm., there will be six-eight micrograms per cubic centimeter (minimum four, maximum 12). For 0.5 Gm., (minimum six, maximum 26). When 0.6 is given intravenously in a single injection, the mean concentration will be 12-16 micrograms per cubic centimeter (minimum 10, maximum 26).

Satisfactory concentrations of streptomycin can be obtained in the blood and urine following intravenous, intramuscular and subcutaneous administration.

The dosage of streptomycin in our series of cases was set at a standard of one Gm. daily, irrespective of the patient. However, a few were cut to one-half Gm. total per day because of toxic symptoms developing. In some cases, on first sign of possible reaction, the dosage was cut to the latter figure. Because of these toxic symptoms manifesting themselves, we began giving one Gm., divided into doses at six hour intervals for seven days, then the treatment was stopped for three weeks. At the end of this rest period, the identical dosage was re-instituted. On this intermittent treatment, we have had one patient in the third interval of treatment develop an apparently allergic reaction with chills and high temperature.

The usual forms of this drug are streptomycin in hydrochloride, sulfate, or phosphate and the solutions are more potent in alkaline conditions than in acid. It is dispensed as a powdered substance in ampules containing 1,000,000 or more S units, or one Gm. of the crystalline salts.

For intermittent intramuscular injections, 125 Mg. per cc. of distilled water or normal saline solution were given every three to four hours. For continuous intramuscular administration, the desired dose of one to

*Presented before the Section on Medicine at the Annual Meeting of the Oklahoma State Medical Association, May 15, 1947.

two Mg. may be dissolved in 500 to 1000 cc. of physiologic saline solution. It may be given subcutaneously in amounts of one Mg. per cc. Intermittent intravenous administration has no advantage over the intramuscular or subcutaneous methods and is not recommended. It may be used for continuous intravenous drip by total daily doses from one to four Gms. administered in two liters of physiologic saline solution in 24 hours. For intrathecal administration, 10-20 Mg. per cubic centimeter in isotonic sodium chloride solution should be used. It may be repeated at intervals of 24 to 48 hours.

For nebulization, 24 to 50 Mg. per cc. are used. Orally, as much as five Mg. to several grams may be used per day in four divided doses. Incidentally, it has been reported that it is possible to eradicate both gram-negative and gram-positive organisms by nebulization of streptomycin in the bronchial tree.

For topical application, solutions containing 25-40 Mg. per cubic centimeter may be used. Treatment should be continued for at least 48 to 72 hours after the temperature returns to normal and all signs of infection have disappeared.

Streptomycin may also be administered locally by direct instillation into cavities and by nebulization.

TYPES OF CHEST CASES TREATED

Now, let us turn to the use of streptomycin in the treatment of chest cases. It has been advocated as an effective agency in tuleremic pneumonia, *Klebsiella pneumoniae*, in plague bacillus, influenzal infections, proteus vulgaris, *Aerobacter aerogenes* infection, *Escherichia coli* infections, and *Hemophilus influenzae* infections. In our series of cases we should like to include the following: bronchiectasis; mixed organisms; lung abscess; histoplasmosis, tuberculous empyema; mixed empyema; cavernous tuberculosis, tuberculous tracheitis, bronchitis, and of course exudative pulmonary tuberculosis. The most recent communications brought to our attention two cases of tuberculous peritonitis.

At the State Sanatorium, we have been very much interested in the use of streptomycin in pulmonary tuberculosis; especially in cases with extensive bilateral disease that cannot be treated by any of the other methods. These are the cases that would be considered primarily salvage material. However, as others before us, we found that early, fine, pulmonary lesions respond much more

favorably to streptomycin therapy than old, fibrocavernous lesions.

From three to six weeks was the earliest that any definite resolution could be observed in the roentgenograms of the chest. When treatment was discontinued there were a few instances where reactivation of the process was noted.

Symptomatic improvement is noticed within one to two weeks after administration of this drug. Fever declined, and temperature became normal within four to eight weeks. There was a return to a sense of well-being and a disappearance of stupor, headaches and muscle rigidity have been associated manifestations. It is our belief that miliary or hemotogenous tuberculosis and exudative or pneumonic types, early cases of course, should be treated with maximum tolerated doses.

With the exception of histoplasmosis and tuberculous empyema, we have had very good results in the use of this drug. However, in the latter condition, there was a noticeable thinning of the previously thick fluid raised, and a decrease in the cough, while taking streptomycin. The cases of mixed empyema, tracheitis of tuberculous origin or otherwise, lung abscesses, and mixed organisms appeared to clear entirely. Also, we have found it to be of definite value in the preparation for pulmonary surgery and resection.

TOXIC REACTIONS

Much has been said as to the toxic reactions caused by this drug. It is known to be capable of producing side reactions of varying severity. Certain lots have been found which produce a histamine-like reaction on parenteral administration with a fall of blood pressure and syncope. The most serious toxic effect of streptomycin is its neurotoxic action on the eighth nerve which may occur in about 10 percent of patients treated with large doses (three to four Gms. daily) over periods of several weeks to months. Some common reactions are nausea, malaise, fever, renal irritation, arthralgia, local reactions at the site of the injection, urticaria, puritus, and contact dermatitis.

Out of 76 cases treated, 20 were available for interrogation, and included the various types of chest conditions previously mentioned as having been treated in our series. This survey includes not only the toxic reactions, but also the beneficial manifestations, as experienced by the patient himself.

TOXIC REACTIONS

(1)	Nausea	15 percent	(all males)
(2)	Malaise	25 percent	
(3)	Fever	20 percent	(noticeable rise)
		30 percent	(had previously been running temperature but decreased to normal)
(4)	Arthralgia	40 percent	
(5)	Dizziness	40 percent	(one man, on the 28th day, lost sense of balance, couldn't walk without help. After three months he is improving.)
(6)	Renal irritation	15 percent	(all males, noted frequency of urination and burning.)
(7)	Defective hearing	10 percent	(no deafness, ringing sensation)
(8)	Skin reactions	30 percent	(rash over stomach, back and arms. Itched. Also, ringworm-like rash.)
(9)	Loss of appetite	15 percent	(one patient said everything but meat tasted rotten.)
(10)	Loss of weight	15 percent	
(11)	Tingling sensation	20 percent	(noticed immediately following shots, cleared in 5-10 minutes)
(12)	Headaches	30 percent	(pressure headaches, felt like top of head was coming off)
(13)	Nervousness	10 percent	(when taking shots every six hours, nervousness diminished)
(14)	Pulse rate drop	10 percent	(pulse dropped from 102 to 52)
(15)	Numbness	15 percent	(complained of dead feeling to the lips and drawing of face skin)
(16)	Gall bladder upset	10 percent	

BENEFICIAL MANIFESTATIONS

75 percent reported that they felt better generally.

51 percent noticed an increase in appetite.

20 percent of patients with cough noted that cough diminished, three stopped completely.

25 percent were raising thick material, noticed that the fluid was much thinner and amounts smaller.

60 percent noticed a gain from five pounds to 29 pounds.

100 percent slept better while on treatment.

One patient had a gum condition which cleared up on this drug. Also a very husky voice for past two years. Voice became normal.

One patient had a rattle in chest on coughing. This ceased entirely.

Two patients with drainage from ears, noted drainage ceased.

Two patients reported absence of prostatic condition previously present.

One patient noticed that her complexion cleared considerably.

As a summary of this report, the following conclusions have been reached in the use of approximately 1750 Gms. of strepto-

mycin in the treatment of various types of chest conditions in 76 patients.

- (1) Patients seem to do just as well from weekly, intermittent treatments as they do from continuous treatment for long periods of time. More beneficial results have been obtained from interrupted treatment as contrasted to the cumulative toxic effects and fastness to the drug which results from prolonged and continuous treatment.
- (2) Longer intervals of time between shots give the patient less anxiety. We find that one Gm. doses divided into shots every six hours are tolerated better than every three hours.
- (3) We do not believe that streptomycin is a cure for tuberculosis, but we do advocate its use because we believe that it is an aid in reducing the secondary infections. This was brought out in the survey presented, and the microscopic findings show that the bacterial flora has diminished. In some cases, we noted that the sputum was negative for organisms entirely.
- (4) Streptomycin has eliminated the immediate post-operative infectious complications. These being eliminated, we

are now bothered only with the mechanical and technical complications such as lost air spaces and spontaneous pneumothoraces, etc. in chest surgery.

- (5) With the exception of cases of histoplasmosis and tuberculous empyema, our results in various types of chest cases have generally been good from the use of streptomycin.

In many cases, streptomycin appears to suppress tuberculosis rather than to eradicate it, being apparently bacteriostatic rather than completely bactericidal in the concentrations which can be obtained in the tissues. We cannot subscribe to the idea that streptomycin should not be instituted in chest cases unless it is available for four months' supply, or 300 to 400 Gms., the

amount recommended. On the contrary, we have seen good results in streptomycin therapy in small doses.

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PEPTIC ULCER*

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Peptic ulcer occurs only in those portions of the digestive tract that are exposed to the action of acid gastric juice; that is, lower portion of the esophagus (rarely); the stomach; first portion of the duodenum and rarely the second portion of the duodenum; after gastrojejunostomy ulcer may form at the stoma, and in Meckels diverticulum when aberrant gastric mucosa is present; it may occur at the pylorus, or adjacent to it, that is prepyloric and postpyloric.

Autopsy and x-ray studies have shown that approximately 10 percent of all persons have a chronic duodenal or gastric ulcer at some time in their lives. Duodenal ulcer is thought to be about 13 times as common as gastric ulcer, and duodenal ulcer occurs four times as often in the male as in the female; gastric ulcer is more common in women. The vast majority of peptic ulcers occur in the first three or four cm. of the duodenum, or along the lesser curvature of the stomach—the so-called "mangelstrasse," about two inches or more from the pylorus. Peptic ulcer is considered the most frequent intrinsic organic cause of chronic recurring dyspepsia.

Although the lean, thin asthenic type of

person is said to be the ulcer type, the lesion is often seen in short stock, obese patients so that constitutional type is of no real clinical significance in the ulcer problem.

Although there have been many theories advanced to explain the etiology of peptic ulcer, the cause is unknown. The acid factor and the neurogenic factor however, are known to be of major importance in the production of and the recurrence of ulcer.

DIAGNOSIS

The basic diagnostic requirement is a good history, for the diagnosis may never be made unless the possibility of ulcer suggests itself to the physician—and the proper investigations are made. The outstanding symptom is pain in the epigastrium, between the xiphoid and the umbilicus. Its characteristics namely, chronicity, periodicity, and relation to food taking are well known. Aggravation or recurrence of ulcer pain is apt to occur at certain periods of the year, especially from early fall through March and April, and is very commonly worse around the Christmas holiday season. The pain may, and often does radiate through to the back in the lower dorsal spine region; or to the right lower abdominal quadrant, causing mistaken diagnosis of appendicitis at times. If the pain is severe in the back, it is suggestive of chronic penetration or perforation of the

*Presented before the Section on Medicine at the Annual Meeting of the Oklahoma State Medical Association, May 14, 1947.

ulcer to the pancreas, but does not necessarily prove this to be the case. Not uncommonly, back pain is the predominant complaint and the abdominal symptoms are so much in the background that they are not mentioned by the patient. The pain of duodenal ulcer is apt to be to the right of the mid line, and that of gastric ulcer to the left of the mid line. The pain of gastrojejunal ulcer tends to be located to the left of and just below the navel. Typically the pain occurs from one to four hours after a meal and is very common and more severe at night between midnight and three a.m. If pain occurs in the early morning hours before breakfast it is suggestive of pyloric obstruction. The pain is usually relieved by milk, bland food, antacids and by induced vomiting. When the usual character of ulcer pain changes to a more or less constant pain, often aggravated, rather than relieved by food, one may consider the probability of complications, such as, deep penetration of the ulcer, or of pyloric obstruction developing. A few patients do not complain of pain at all and a massive hemorrhage or an acute perforation may at times be the initial symptom. Then there are some ulcer patients having a typical pain resembling acute appendicitis, acute biliary colic or gastric crises of *tabes dorsalis*. Substernal pain is noted in a few.

Vomiting may occur in the absence of obstruction when the pain is severe, and when the lesion is located in the pylorus. When persistent however, or when the emesis contains food eaten the day before, obstruction at the outlet of the stomach is to be suspected; the obstruction may be due to edema and inflammatory reaction, or to cicatricial stenosis. Other symptoms of peptic ulcer, such as gas or a sense of fullness, belching, heart burn, water brash, constipation, etc., are not peculiar to this disease.

Physical examination is not of any material help in the diagnosis of uncomplicated peptic ulcer as it is frequently negative except for tenderness in the upper abdomen, which is usually indefinite.

Gastric analysis may reveal normal gastric acids, sometimes a lowered amount of free HCl, but more often a hyperacidity and an increased volume of gastric juice. The demonstration of free HCl in the gastric contents is essential to the diagnosis inasmuch as peptic ulcer does not occur in the presence of an acidity. As a routine, a modified Ewald test meal of eight Arrowroot cookies and

400 cc. of water has been very satisfactory. If no free HCl is found by this meal, an alcohol meal, or a fractional histamine test may be given so as to be certain we are dealing with a true achlorhydria. However, the degree of acidity found is not of much diagnostic help in peptic ulcer. If fresh blood is noted in the gastric contents, it probably is traumatic due to the tube, but if old blood or coffee ground material mixed with the gastric contents is found, a bleeding lesion is signified.

Stool analysis—the demonstration of occult blood is at times of diagnostic value, but is usually absent.

X-ray examination is by far the most important method available for the diagnosis of ulcer. Probably 95 percent of ulcers can be demonstrated by an expert. The roentgen ray examination consists of a fluoroscopic examination, using manual compression and this is followed by a film for a permanent record. Duodenal ulcer will be manifested by the niche or by deformity of the duodenal bulb or by both. About 95 percent of the ulcers will be found in the bulb and about five percent in the second portion of the duodenum. Attempt should be made to demonstrate the niche or crater because it is pathognomonic of ulcer and of its activity. A central crater may be present without deformity of the bulb; however, deformity of the bulb means duodenal ulcer nine times out of 10. In gastric ulcer the crater is usually seen as a penetrating niche or out pocket in profile along the lesser curvature of the stomach; at times the ulcer is on the anterior or posterior wall away from the lesser curvature. When a gastric ulcer heals, the niche disappears and no deformity of the stomach results. When a duodenal ulcer heals, very often the scar contractures result in a permanent deformity in the duodenal bulb.

Gastroscopy is of value in confirming the clinical and x-ray diagnosis of gastric ulcer, but the great disadvantage is the inability to see beyond the pylorus. It is helpful in distinguishing benign from malignant ulcers.

Complications. The principal complications of peptic ulcer are hemorrhage, perforation and obstruction. To these may be added malignancy, which occurs in about 10 percent of *gastric* ulcers.

(1) Massive hemorrhage: About 20 percent of peptic ulcer patients experience massive bleeding at some time. The ulcer located on the posterior wall of the duodenal bulb

seems especially prone to hemorrhage. Hemorrhage may be the initial symptom in some cases. Most patients under 50 recover but hemorrhage is more serious in the patient past 50 because of the arteriosclerotic factor and the decreased ability of the bleeding vessel to contract. The symptoms of hemorrhage are well known (will vary with the suddenness and severity of the bleeding and may include pallor, weakness, dyspnea, hematemesis, tarry stool, prostration and syncope. The blood pressure falls, the pulse rate increases, the leucocyte count rises and then the hemoglobin and red cell count drops.) Symptoms of anemia may be the most prominent and mask the gastric symptoms.

(2) Perforation. Acute perforation is the most dangerous complication of ulcer and is the most common cause of death. It occurs about nine times as frequently in the duodenum as in the stomach, and nearly always in the male sex. It may occur without warning, or it may follow exertion and may be the first intimation the patient has of any gastric disturbance. The symptoms are similar to those of any ruptured viscus and include sudden excruciating pain in the upper abdomen with sweating pallor, subnormal temperature and "board like" rigidity and tenderness. Unless immediate operative intervention for the closure of the perforation is undertaken within a few hours, peritonitis develops, with death in a few days.

Subacute perforation is less intense than the acute and spontaneous closure often occurs as a result of fibrinous adhesions to the pancreas, liver or omentum so that recovery follows without surgical interference. These "formes frustes" perforations may go unrecognized. At times an abscess, subphrenic, follows such a perforation.

Chronic perforation. The base of an ulcer is at times formed by the capsule of the pancreas or liver, or some other adjacent organ; at times, a jejunal ulcer may perforate into the colon without any pain, and the first and only symptom is diarrhea.

(3) Obstruction.

As stated before, vomiting is the prominent symptom, and the obstruction may be due to spasm at the pylorus, to edema and inflammatory swelling about an ulcer, to cicatricial stenosis, or to a combination of these factors. About seven percent of duodenal ulcers have some obstruction at one time or another. Obstruction is the most frequent indication for surgical treatment in peptic ulcer, but we should remember that

in about 85 percent of the obstruction cases, edema and inflammatory swelling is the chief factor and is amenable to medical treatment. The diagnosis is made by aspiration of the stomach contents and by x-ray. X-ray examination of the stomach will show it to be dilated and atonic and no barium is seen to enter the duodenum. Gastric aspiration will reveal 300 cc. or more of retention.

Malignant gastric ulcer. Inasmuch as approximately 10 percent of gastric ulcers are malignant, there will be difficulty at times in differentiating a benign from a malignant gastric ulcer. The former should be given medical treatment and the latter will require gastric resection. The history and the chemical findings on gastric analyses and the x-ray examination all may in certain instances be misleading. However, when in doubt, we try three or four weeks of good medical treatment and in that time a benign ulcer should disappear and occult blood in the stool should clear up; if this does not occur, the evidence favors a malignant ulcer. The gastroscope may give us valuable help here if done by an experienced gastroscopist.

TREATMENT

The management of chronic peptic ulcer is primarily a medical problem and surgical measures are reserved only for some of the complications.

The purpose of treatment is three-fold; first, to control symptoms; second, to give an adequate program so the ulcer will heal, and third, to prevent recurrences as far as is possible.

In order to properly treat peptic ulcer, the physician must educate the patient regarding the nature of his disease—the same as one would the diabetic. He should understand that we are dealing with a chronic disease, that the ulcer will heal under treatment, but that it also tends to recur under certain conditions. It should be explained that although the cause of ulcer is unknown there is a definite emotional control and many recurrences are due to psychosomatic upsets. Fatigue, strain and worry may precipitate a relapse and this should be emphasized to the patient. Explain that nervous tension, not nervousness, is the factor that will aggravate his ulcer. It is quite generally agreed that the neurogenic, or the psychosomatic aspect is most important in a large number of cases. We should also explain the importance of the chemical factor and the necessity and rationale of frequent feedings of bland food, the interval

milk feedings and the use of gastric antacids to neutralize the excess acidity. The patient should know the difference between relief of symptoms which may occur quickly under good treatment, and the healing of the ulcer which will require six to eight weeks or more. Then the necessity for long term attention to diet with inter-meal and bedtime feedings of milk and improved habits of living for at least two years should be impressed on the patient.

The use of caffeine containing beverages should be discontinued, as it has been shown that caffeine is a moderately potent stimulant of gastric secretion. It aggravates an ulcer in much the same manner as does alcohol, smoking and food indiscretions. The ulcer patient should be urged to give up smoking entirely. Alcohol should not be taken in the active stages of ulcer and never in concentrated form. Better cooperation of the patient is apt to be obtained as a result of time spent discussing these factors. He should be encouraged to report at periodic intervals and I believe that recheck fluoroscopic examinations from time to time encourage the patient with peptic ulcer.

The early diagnosis and the prolonged adequate treatment of peptic ulcer is the best way to prevent the serious complications of hemorrhage perforation and obstruction with their attendant mortality. At the present time about 12 percent of complicated or intractable duodenal ulcers require surgery.

The majority of peptic ulcer cases can be treated satisfactorily by an ambulatory regimen, although about 15 percent may require, or be better managed, by two or three weeks hospitalization. Some gastroenterologists prefer to hospitalize their patients for the first two weeks treatment, finding this method more satisfactory from the standpoint of educating the patient regarding his disease. This has the advantage of putting the patient at rest, which is an important feature of the treatment. However, it is not only physical rest, but mental rest that is important.

The treatment may be discussed under the headings of (1) diet, (2) antacids, (3) antispasmodics, gastric secretory depressants and (4) central nervous system sedatives. In either hospital, or ambulatory cases, milk and cream mixtures in three or four ounce amounts are given hourly from 7 a.m. to 9 p.m. at first, and as symptoms improve, are often given every two hours in six ounce amounts. Many patients have less

gastric disturbance on a two hour feeding. In the milder case three bland meals daily are also given at the outset, and in the more severe cases the meals are started a few days later. Milk is the foundation of the ulcer diet and is a good neutralizer of free HCl—the proteins lactalbumen and lactoglobulin being responsible for its buffering action. One can add dried milk powder to liquid milk in the proportion of two and one-half tablespoonsful to eight ounces liquid milk increasing the protein content a great deal and consequently improving its neutralizing capacity. Dried milk has 25 percent protein and dried skimmed milk 35 percent protein. The protein hydrolysates which have been publicized a great deal the past two years, are said to be effective because of their high content of predigested protein, thus making them good buffers for gastric acidity, and in correcting protein deficiency, make for more rapid healing of the ulcer. However, their very disagreeable taste and odor so far has made it difficult to get patients to take them. As the patient improves, additions to the diet are gradually made after the first week so that by the third week ground or scraped beef may be added to the bland diet. Then add lamb, fresh fish, chicken and beef as time goes on. The interval feedings of milk and cream between meals and at bedtime are continued and preferably for life. Vitamin concentrates, especially vitamin B complex and C, should always be added to the diet.

The Use of Antacids. Since the Sippy antacid treatment came into popularity over 30 years ago, antacids of one kind or another have been used in the treatment of ulcer. Complete neutralization of acid is no longer attempted and is inadvisable because of the danger of alkalosis, but an attempt can be made to keep the free HCl at or less than 15 units (Toppers method).

Some gastric fluid can be aspirated now and then to determine the acid concentration. The older soluble antacids, such as calcium carbonate, sodium bicarbonate and magnesium oxide are still popular though given in considerably smaller dosage than in the original Sippy powders. For instance, powder or tablet No. 1 would contain calcium carbonate Gr. seven and one-half and sodium bicarbonate Gr. five; and powder or tablet No. 2 would contain calcium carbonate Gr. seven and one-half and calcined magnesia six Gr. These may be alternated, using them either every four or every two hours at the start of treatment.

At present, an insoluble gastric antacid, aluminum hydroxide gel in combination with magnesium trisilicate in dosage of two teaspoonfuls about six times daily in the beginning is the most popular. In some cases it may be advantageous to alternate this with a soluble antacid power of calcium carbonate sodium bicarbonate and magnesium oxide. A combination of tribasic calcium, phosphate gr. 20 and tribasic magnesium phosphate gr. 15 is preferred as an antacid by some physicians. In a few intractable cases in whom night pain is difficult to control, the use of a "continuous drip" through a nasal tube passed into the stomach has been advocated. Either aluminum hydroxide gel diluted 250 cc. to 1000 cc. of water, or milk to which some sodium bicarbonate has been added may be used. This method is effective but mechanical difficulties are a disadvantage and the patient may be intolerant of the nasal tube; or therapeutic aspirations may be done at night.

Antispasmodics. One of the most useful preparations in the treatment of an active ulcer is the antispasmodic. Extract of belladonna in doses of one-eighth to one-fourth gr., or atropine 1/200 to 1/150 gr. before meals relieves pylorospasm and assists in reducing hypersecretion. Atropine gr. 1/100 at night helps to control night pain, night secretion and vomiting. There are many substitutes such as povatrine, novatropine, syntropan and trasentrin, which are also effective and lack some of the undesirable side effects of belladonna and atropine.

Sedatives, also have a very definite value in the treatment of active ulcer in that they relax the nervous tension. The barbiturates phenobarbital or nembutal often in combination with antispasmodics are usually used. The dosage and frequency will be individualized for each patient.

MANAGEMENT OF COMPLICATIONS

1. Massive Hemorrhage

This complication for which so many varying mortality rates are given in various hospitals should nearly always be treated medically with hospitalization, the use of opiates, and sedatives hypodermically, and early blood transfusions. If the blood N.P.N. is high, give more transfusions. Intravenous glucose and saline in 500 to 1000 cc. amounts may be given intravenously. Milk feedings in small amounts every two hours are usually started at once after the patient recovers from the initial shock, though many prefer to wait 24 hours before giving any nourishment by mouth. At the Presbyterian Hos-

pital in Chicago, excellent results with an overall mortality of less than two percent for all ages are reported by the use of (1) early and opious blood transfusions (2) gastric lavage with ice water followed by 1/2 ounce of 1-1000 adrenalin diluted in two or three ounces of water, (3) continuous milk drip with added soda bicarbonate through a Levin nasal tube to keep the forming clot from being digested by gastric acid. The massive hemorrhage cases are not operated. Surgical mortality in hemorrhage cases is about five percent even in expert hands. If surgery is advisable for repeated hemorrhages, the operation should be done in between hemorrhages. I have not used the Meulengracht method of treating massive hemorrhage. In this method the hemorrhage patient is immediately started on rather full feedings of bland diet containing meat, about as one would give to an uncomplicated ulcer. Excellent results with a mortality of 1.5 percent have been claimed for this method.

2. Obstruction

Medical treatment using a Wangensteen suction intravenous fluids and vitamins, etc. should be given a trial of a week to determine whether inflammation and edema is the cause of obstruction, or whether it is due to stenosis of scar tissue. If the obstruction is not relieved in a week, surgery is indicated and this makes up about 15 percent of the pyloric obstruction cases due to ulcer. The other 85 percent can be treated medically. When a retention of around 800 cc. or more is obtained, surgery will be indicated. Obstruction is the most frequent indication for surgical treatment in peptic ulcer. Either a posterior gastroenterostomy or a subtotal resection should be performed. Prior to operation the patient needs preparation with intravenous glucose and saline and amino acids, or blood transfusions, and large amounts of parenteral vitamins are given.

3. Perforation. When acute this serious complication requires immediate or emergency surgery to save life. When perforations are subacute or chronic there may be little or no spillage of intestinal contents. Most of these subacute, or chronic perforations occur on the posterior wall of the duodenum and the lesser curvature and posterior wall of the stomach extending into the pancreas and liver. Whether conservative treatment or whether operation should be attempted will depend on the physical signs of rigidity, muscle spasm, etc. Surgery may be required later in many of these cases.

4. Intractability. Those cases of ulcer

which fail to respond to intensive medical treatment, or which constantly recur in spite of good therapy, may require surgical intervention. However, we should be sure that the case is really intractable before talking about surgery. At the present time the operation of vagus nerve resection or vagotomy is thought by some surgeons to be the best answer to the problem of chronic intractable ulcer. Immediate, complete and apparently permanent relief from pain is experienced. Dragstadt, who has been doing vagotomies for four years, and has had an extensive experience, claims that the excessive nocturnal secretion of gastric juice is neurogenic and is abolished by vagotomy and this is the reason for doing the nerve section. The output of HCl is reduced by vagus nerve section but the section must be complete—that is, all the fibers must be cut to get a

good result. Apparently it is easy to miss some fibers and then failure of the operation results. This operation is also considered useful in the gastrojejunal ulcers that occur after gastroenterostomy, or gastric resection, and are so hard to control with medical management. Walters thinks that vagus nerve resection after gastric resection is its greatest field of usefulness. One of the major complications of vagotomy has been dilation and delayed emptying of the stomach if a gastroenterostomy or gastric resection has not been done prior to the vagotomy.

5. Malignancy is a complicating factor in around 10 percent of gastric ulcers, and surgery is indicated when the therapeutic test or the x-ray, chemical or gastroscopic findings suggest that the ulcer is undergoing malignant changes. The operation of vagotomy is contraindicated in this situation.

CLINICAL PATHOLOGIC CONFERENCE

The University of Oklahoma School of Medicine

Presented by the Departments of Pathology and Medicine

BELA HALPERT, M.D. AND VERNON D. CUSHING, M.D.

OKLAHOMA CITY, OKLAHOMA

DR. HALPERT: The patient whose story we are considering today presented the problem of marked cardiac failure of undetermined etiology. Despite vigorous symptomatic therapy he died shortly after his admission to the hospital. We have Dr. Cushing to present and analyze the clinical data.

PROTOCOL

Patient: J. H. P., 57 year old white male, admitted November 20, 1947; died November 20, 1947.

Chief Complaint: Shortness of breath on exertion, chronic cough and swelling of the feet and ankles.

Present Illness: The patient was first admitted to the University Hospitals on August 19, 1947, with complaints of shortness of breath on exertion, chronic cough, episodes of nocturnal dyspnea and diffuse soreness of the chest for one and one-half years. These symptoms gradually became worse. He had been unable to work since December, 1946. During the four months prior to admission the symptoms had been

particularly severe. For three weeks there had been swelling of the feet and ankles; blood pressure at this time was 106/80. The diagnosis was established of arteriosclerotic heart disease with cardiac decompensation, cardiac enlargement, pleural effusion and old myocardial infarction. During his hospital stay he was digitalized and given ammonium chloride and salyrgan. Two thousand cc. of straw colored fluid was removed from the right pleural cavity. Convalescence was satisfactory and he was discharged September 6, 1947. In the Outpatient Department he was placed on puridigin, 1 10 mgm. twice a day, ammonium chloride, 60 gr. daily, and a cardiac diet; he received injections of crude liver and salyrgan. His blood pressure was 95/65 on October 23, 1947, and 90/65 on October 30, 1947. On November 13, 1947, 2500 cc. of amber fluid was removed from the right pleural cavity. He was readmitted on November 20, 1947, severely dyspneic and in marked congestive heart failure.

Past History: Chickenpox at three, malaria at 10, measles at 16 and typhoid fever at the age of 19 years. For 15 years he had had occasional epistaxis, otherwise the past history was non-contributory.

Family History: Father died at 77 years of "old age," mother at 45 of a "stroke." One aunt died with diabetes mellitus, and another with pulmonary tuberculosis. The patient's wife died in a mental institution in Vinita, of syphilis.

Physical Examination: The patient was middle aged, well developed and well nourished. He appeared acutely ill and orthopneic with pale, cyanotic, cold, moist skin. Temperature was 100°F; pulse rate 98; respiratory rate 40; blood pressure 110/100. There were marked flatness to percussion and absence of breath sounds over the lower half of the right chest and dullness with moist rales over the lower third of the left chest. Vocal fremitus was decreased on the right. The heart was enlarged with the apex in the anterior axillary line at the sixth intercostal space. The rate was regular, 128 per minute. A loud systolic murmur was heard over the entire precordium. The abdomen was moderately distended. The liver was enlarged—the lower margin at the umbilicus. Marked pitting edema was present over the lower extremities.

Laboratory Data: On August 20, 1947, the urine was amber, clear, with a pH of six and specific gravity of 1.038. It contained a slight amount of protein, 0-2 red blood cells, 0-2 white blood cells and a few coarsely granular casts per high power field. The blood contained 14.5 Gm. percent Hb, the red blood cell count was 4,850,000; the white blood cell count was 9,700 with neutrophils 67, lymphocytes 25, monocytes 8 percent. The Mazzini test of the blood was negative. On October 26, 1947, blood NPN was 41.9 mgm. percent. Electrocardiographic diagnosis was: Old anteroseptal infarct; low grade left ventricular hypertrophy; digitalis effect; horizontal position of the heart. Roentgenologic examination of the chest disclosed that the transverse diameter of the cardiac shadow, which appeared enlarged, could not be measured because of the density of the right lung base. There was a homogeneous veiling of the lower third of the right lung field with increase in size of both hilar shadows and of the peribronchial markings at the left base. The diagnosis was "enlarged heart with pulmonary congestion and pleural effusion, right." Repeated roentgenograms of

the chest at intervals continued to show fluid in the right pleural cavity. No laboratory work was recorded at the time of this admission.

Clinical Course: Morphine sulphate, nasal oxygen, digitoxin, ammonium chloride, and cardiac diet were given. Thoracentesis was performed, with removal of 2050 cc. of clear, straw colored fluid from the right pleural cavity. At 2:00 p. m. the patient went into what appeared to be marked shock; the blood pressure was unobtainable, pulse irregular and skin clammy. Thoracentesis was again performed and 250 cc. pneumothorax given without change in the patient's condition. Supportive therapy was of no avail and he died at 9:50 p. m., on the day of admission.

CLINICAL DIAGNOSIS

DR. CUSHING: At first glance the clinical data presented to me seemed to fall into a rather obvious pattern, and it appeared that there was little of a diagnostic problem in this case. More careful study disclosed many factors which could not be correlated with my first impression however, and this case has resolved itself into what, for me, is a difficult diagnostic problem. The initial symptoms and chief complaints of this patient are immediate evidence that two systems of the body are involved, the cardiovascular and the respiratory systems. Are these the result of two independent diseases or is there a cause-effect relationship, and if so which is cause and which effect? The presence of nocturnal dyspnea is in itself good evidence that the cardiovascular system is the primary source of trouble and that involvement of the lungs is probably secondary.

Given a case of heart failure in which signs and symptoms are largely referable to the lungs, we assume that this represents "left heart failure." If the condition continues, we anticipate a gradually increasing pulmonary venous pressure and a progressive increase in demands upon the "right heart" until finally failure there is reflected by an increase in systemic venous pressure, chronic passive congestion of abdominal viscera and edema of the lower extremities. This is essentially the story presented by our patient today so that it focuses our attention upon some lesion involving the "left heart." As we read further in the present illness, we find that a diagnosis had been made of arteriosclerotic heart disease, and that there was electrocardiographic evidence

of an old myocardial infarct. During the patient's first hospital course, 2,000 cc. of straw colored fluid was removed from the right pleural cavity. This is quite compatible with cardiac failure and it is interesting that in the acute hydrothorax of heart failure, the right side is usually more effected than the left. According to our history, the patient made a satisfactory convalescence and was discharged approximately three weeks after admission. This is quite a good response and indicates at least a moderate cardiac reserve.

The family history is quite tantalizing with the information presented, and yet much that we need to know is not included. Particularly we should like to know the extent of contact with the tuberculous aunt and, in view of his wife's syphilis, whether the patient ever had syphilis, the extent of treatment, etc.

Most of the physical findings could have been anticipated on the basis of previous history. The marked flatness to percussion, and absence of breath sounds over the lower half of the right chest with changes over the left chest are probably the result of hydrothorax. Abdominal enlargement, enlargement of the liver and marked pitting edema of the extremities, are all further evidence of right heart failure. The statement that a loud systolic murmur was heard over the entire precordium is undoubtedly a clue to the etiology of this heart failure, but it is not of great help because any systolic murmur which is loud enough to be heard over the entire precordium could originate from any of the valve areas.

Urinalysis reveals occasional red blood cells, white blood cells and casts. Such a picture is compatible with chronic glomerulonephritis, but these findings are equally compatible with chronic passive congestion of the kidneys. In consideration of the history it seems quite reasonable to charge this also against cardiac failure. The electrocardiographic diagnosis of an old anterior septal infarct confirms our previous evidence of an old infarct.

Roentgenologic examination yields about what we would expect. The fluid that was known to have been in the chest is visualized and the heart appears to be enlarged, although it cannot be accurately measured because fluid obscures the transverse measurement. The patient's clinical course on his last admission was quite short. Following thoracentesis the patient went into what appeared to be marked shock. Thoracentesis

was again performed and 250 cc. of air was instilled. Presumably this was done in order to compensate for the sudden mediastinal shift that might follow the aspiration of over two litres of fluid.

We have then the case of a 57 year old white male with gradually increasing cardiac decompensation—first, left heart failure, followed by right heart failure. The course progressed rather rapidly once cardiac manifestations were evident. Pertinent physical findings included cardiac hypertrophy and dilatation with a low systolic blood pressure. Now, what is the basis for this enlargement of the heart and ultimate failure? Almost certainly it is an effect of increased work. We must consider then certain valvular deformities as well as hypertension. In view of the recorded normal blood pressure is *hypertensive disease* a possibility? Such a thing is possible if one considers that the patient might have had hypertension over a period of years, gone into cardiac failure and as a result of decompensation, developed a decrease in blood pressure which obscured the former state. If this had been the case we would have expected the blood pressure to return to its original hypertensive level following the "satisfactory convalescence" described during the first period of hospitalization. Since this did not occur, hypertension seems to be excluded. An obstructive valvular lesion such as *aortic valvular stenosis* would explain the cardiac hypertrophy associated with decompensation and also the low systolic blood pressure which was an outstanding characteristic of this patient's illness. It would also be compatible with the rather vague, diffuse chest pain which the patient described. Furthermore, if this were a condition of aortic valvular stenosis, the lesion might very well involve the sinuses of Valsalva and produce direct narrowing of the coronary orifices. Thus, the old infarct that has been described might possibly be related to an aortic valvular lesion. On the other hand, changes in coronary arteries might represent an entirely independent process. It is well known that patients with aortic valvular disease do not fare as well as patients with other types of valvular lesions. The first time they decompensate and are treated, they may respond very well, but usually their improvement is only temporary. When they decompensate a second or third time they are quite resistant to therapy and their prognosis is very poor. Furthermore, patients with aortic valvular disease, especially aortic stenosis, are liable

to sudden, unexpected death.

What is the nature of this lesion that we have been hypothesizing? It seems unlikely that it is an effect of rheumatic fever since we have no evidence of mitral valvular involvement in the physical findings that this man has presented. With valvular involvement in rheumatic fever, almost always the mitral valve is damaged more than any other and although aortic valvular damage frequently occurs, it is usually of lesser importance. *Luetic aortitis* with aortic regurgitation can be eliminated on the basis of a relatively small pulse pressure, absence of a diastolic murmur, and a complete lack of positive evidence for aortic regurgitation. I believe that this man suffered from arteriosclerotic heart disease, and aortic stenosis, both contributing to cardiac failure. If I were to elaborate an anatomic diagnosis simply on the basis of the clinical data which we have discussed this morning, I would do it in this manner: (1) Calcific aortic valvulitis; (2) Old myocardial infarct, and there might be a recent small myocardial infarct; (3) Moderate cardiac hypertrophy; (4) Pleural effusion, right, with pulmonary edema, bilateral; (5) Chronic passive congestion of the liver; (6) Ascites; (7) Arteriosclerotic kidney, i.e., senile arteriosclerosis; (8) Terminal bronchopneumonia; (9) Prostatic hyperplasia, simply on the basis of probability considering the patient's age.

CLINICAL DISCUSSION

DR. HOPPS: Dr. Cushing, you have pointed out that there is no clinical basis upon which to assume aortic insufficiency and you have given many excellent reasons to suppose that this man had aortic stenosis. You conclude that this man suffered from calcific aortic valvulitis. Do you know of any other condition which might affect the aortic valve to give stenosis without a considerable degree of accompanying insufficiency?

DR. CUSHING: No, I can think of no other disease.

ANATOMIC DIAGNOSIS

DR. HALPERT: At necropsy external appearances were much as has been recounted in the history. The man was in fairly good nutritional status. There was edema of the feet, ankles and lower legs, but the abdominal cavity contained no excess fluid. The liver extended eight and one-half cm. below the midclavicular line on the right. The right pleural cavity contained a small amount of air and approximately 1850 ml. of straw colored fluid. There was 125 ml. of comparable fluid on the left side. The pericardial

cavity was essentially normal and contained no excess fluid. The most significant findings are related to the lungs and to the heart. The heart weighed 650 gm., almost twice the normal weight. The apex was blunted and made up mostly of the left ventricle. In addition to hypertrophy there was considerable dilatation. The valves were not remarkable except for the aortic valve. The aortic orifice was markedly reduced in size because of thickening and stiffening of the valve cusps so that they were almost rigid. This was an effect of large calcific deposits in the body and base of the cusps. The adjacent portion of the mitral valve was somewhat involved also, particularly its base, although this was probably not of much clinical significance. The aortic orifice was actually fixed in the form of a slit approximately two cm. long and from 0.4 to 0.6 cm. wide. As a consequence of this the wall of the left ventricle was thickened to 2.6 cm.—over twice the normal, and this in spite of moderate dilatation. Coronary orifices were patent and were not affected by this calcific process. The lungs were approximately twice the normal weight. This was largely the result of congestion, some edema, and a slight amount of pneumonia.

The spleen exhibited chronic passive congestion and was enlarged about two times. The liver, despite the fact that it extended below the costal margin, displaced there because of hydrothorax, was not increased in weight. There was evidence of slight to moderate chronic passive congestion, however. The kidneys were of essentially normal weight, but there were irregular pits and small depressions on the surface corresponding to arteriosclerotic renal arteries evident upon section. Our anatomic diagnosis in this case reads almost as that of Dr. Cushing and it is as follows:

Calcific aortic valvulitis with stenosis
Cardiac hypertrophy with dilatation
Chronic passive congestion of viscera with hydrothorax and edema of lower extremities
Bronchopneumonia, bilateral
Nephrosclerosis, arteriosclerotic

The etiology of calcific aortic valvulitis is not clear. We know of some causes of aortic stenosis and one of these is congenital. This is not a factor here. A second type of aortic stenosis can occur in conjunction with rheumatic fever. Almost always the mitral valve is primarily involved as Dr. Cushing has mentioned. In this case we find no evidence which would point directly to rheumatic

fever. The third type of aortic stenosis used to be called idiopathic and it is the type that we are dealing with here. It has been thought that perhaps this disease is related to arteriosclerosis. Recently, Karsner and Koletsky have written extensively about this condition and have concluded that the etiology is rheumatic fever.

DISCUSSION

DR. HOPPS: In relation to my previous question I would like to emphasize that calcific aortic valvulitis is the only acquired (or congenital) lesion which will produce valvular stenosis without accompanying valvular

insufficiency. With this in mind, it becomes much easier to make such a diagnosis. I am sure that many of you wonder about the value of x-ray studies in this condition. Rarely are the calcific masses recorded on a routine chest film. The density of surrounding tissue, often including congested and edematous lung, obscures the relatively small calcified bodies. If the lesion is suspected however, careful search with the fluoroscope is often rewarded by the characteristic "dancing shadow" as the calcified aortic valve changes its position with each heart beat.

MEET OUR CONTRIBUTORS

Donald W. Branham, M.D., Oklahoma City, is the author of "Urology in General Practice" appearing in this issue. Dr. Branham was graduated from the University of Oklahoma School of Medicine in 1925.

Specializing in urology, he is a member of the American Urological Association and the Southwestern Branch of the A.U.S. He has been certified by the American Board of Urology.

Paul Lingenfelter, M.D., Clinton, has a paper on "Streptomycin" in this Journal. Graduating from the University of Oklahoma School of Medicine in 1933, his specialty is surgery with emphasis on thoracic bronchoscopy. He is a member of the American College of Chest Physicians.

E. Goldfain, M.D., Oklahoma City, wrote "Diagnostic

Pointers in Rheumatic Diseases," one of the scientific articles in the June Journal. Dr. Goldfain graduated from the University of Colorado School of Medicine in 1921. He specializes in internal medicine and limits his practice to his specialty. He is a member of the American Rheumatism Association.

Harry A. Daniels, M.D., F.A.C.P., Oklahoma City, has a paper on "Peptic Ulcer" appearing in this issue. Dr. Daniels was graduated from the University of Minnesota School of Medicine in 1921 and limits his practice to internal medicine and diagnosis with special attention to gastro intestinal and cardiac diseases.

He is a member of the American College of Physicians and the Oklahoma Internists Association and is assistant professor of clinical medicine at the University of Oklahoma School of Medicine.

CLEANLINESS SHOULD RATE WITH THREE R'S, SAYS HYGEIA EDITOR

"Children should get the same credit for knowledge of health, hygiene, cleanliness and good health habits as they get for reading, writing and arithmetic," Morris Fishbein, M.D., Chicago, says in an editorial in the current issue of *Hygeia*, the health magazine of the American Medical Association.

Outlining a program for a cleaner America, Dr. Fishbein points to the control established over leprosy as one indication of the manner in which cleanliness alone can control an infectious disease.

"We must train children from the earliest period of awareness to proper habits with relation to cleanliness," he observes. "Cleanliness and personal hygiene should be integrated in the curriculum of the schools.

A program for a clean America means "the application of plenty of soap and water—the greatest of all the cleansers—to our surroundings and to ourselves," he states. "The human body is to a great extent a self-regulating mechanism. The skin has great powers for disinfecting itself, and it has been proved that the physical removal of foreign material, including germs, from the skin is important in order to permit the self-

disinfecting power of the skin to function. Germs are highly susceptible to the action of soap.

"More than 20 years have passed since workers at the University of Nebraska conducted some experiments on the cleaning of clothing. A clean body requires clean clothes. They counted carefully the number of germs on underclothing and other clothing near to the human body. From an average count of 400,000 germs per square inch after one use, the number of germs on a square inch of an undershirt increased to 10,000,000 after the shirt was worn six times. When the shirt was put through a modern laundry process, including hot water and soap, the germ count was reduced to 1,000 or less in that area.

"Modern experts have much to say about the psychologic effects of cleanliness. There is a feeling of well-being that follows a good bath. Everyone knows the lift that comes after a bath followed by the putting on of clean clothing. Indeed, the psychiatrists who are concerned with disordered mental states judge to some extent the character of the disturbance in the patient who insists not only on soiling himself but on wearing soiled clothing.

President's Page

In the past few years medicine in the United States has taken a new aspect for the practicing physician. Before the war, the Doctor had only two principles as far as his work was concerned. The first was that of prolonging life and alleviating the pain of his patients by rendering care to the best of his ability and knowledge. Secondly, he tried to better his techniques and increase his medical and scientific knowledge in order to render better care. The medical profession has served humanity well by following these principles. That is evidenced by the prolonged life expectancy, new drugs, techniques, and the place which physicians of the United States now occupy in relationship to those of other countries of the world.

But we physicians of the U.S.A. just like physicians of many other countries, have failed and fallen down on a very important part of our practice. We are now trying to do in a couple of years that which we should have been doing in many past years—that of taking an active part in solving the political problems confronting us. Whether it be neglect, indifference, or ignorance, makes no difference now, for we must all exert ourselves in the fight for free enterprise and the preservation of individuality in the practice of medicine. We all know that if the doctors become employees of the State, incentive will be destroyed.

Today the public has been propagandized and made conscious of federal medicine, socialized medicine, state medicine or whatever NAME you wish to give it. It is up to the physician as a central and respected figure of his community to inform the people of its serious possibilities, and to check legislation which will terminate the present form of medical practice.

C. E. Northcutt

President.



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GENERAL NEWS

THIS IS A.M.A. MONTH!

More than 50,000 square feet of space on Navy Pier have been sold for the technical exhibits at the A.M.A. session in Chicago June 21-25. It is expected that the attendance at the meeting will exceed 30,000.

Oklahoma and Kansas physicians are again having the opportunity to attend the A.M.A. via a special train sponsored by the two state medical associations.

The Rainbow Travel Service of Oklahoma City has also arranged a special post-convention tour to Canada for medical association members and their families. Included in the cost of the trip are round-trip first class rail tickets and Pullman accommodations, all meals from Chicago back to Chicago on post-convention tour, complete sight-seeing as specified in itinerary, transfers of person and luggage at all points and tipping for all luggage handling.

"TELL ME, DOCTOR" NOW CARRIED ON FOUR OKLAHOMA STATIONS

Four Oklahoma stations are now carrying the "Tell Me, Doctor" series of radio broadcasts with several more expected to present their initial program by publication date of this Journal.

The Radio Sub-Committee of the Oklahoma State Medical Association has recommended that as many stations carry the program as the budget will allow without having a geographic "overlap" in reception. Radio time is purchased by sponsors approved by local county medical societies. To date the sponsors are local drug firms. Radio stations have cooperated fully in obtaining popular listening times for the programs. The State Office is prepared to furnish copies on written request of any programs presented. Particular medical problems about which inquiries are received are referred to the Radio Sub-Committee panel of physicians who in turn refer the questions to other specialists unless the question involves a specialty of a physician serving on the committee.

Programs presented so far have titles varying from "Atomic Energy and Medicine" to "Children's Feet and Shoes." Recordings, which are \$2.00 each, are furnished the Oklahoma State Medical Association by the Michigan State Medical Association. This sum represents a cost figure. Recordings are three minutes long, making a five minute broadcast with the commercial. Each recording has six programs.

Stations carrying the broadcast are:

KOCY, Oklahoma City—immediately following the 10 p.m. news Monday through Saturday.

KSPI, Stillwater—8:55 a.m. Monday through Friday immediately preceding news broadcast.

KTUL, Tulsa—5:15 p.m. Monday through Friday, follows news broadcast.

KADA, Ada—4:00 p.m.

Other stations tentatively scheduled to carry the broadcast are those at Durant, Enid, Bartlesville and Pauls Valley.

A.M.A. COUNCIL ON NATIONAL EMERGENCY MEDICAL SERVICE

Representing the Oklahoma State Medical Association at the Council on National Emergency Medical Service of the A.M.A. at a special meeting at A.M.A. headquarters in Chicago April 5 and 6 were C. R. Rountree, M.D., and Dick Graham.

Convening for the purpose of discussing with representatives of the military forces and other governmental agencies the part the medical profession would play in time of national disaster, the conference explained the need for the establishing at the state level, state committees to deal with emergency health problems both from a military, as well as catastrophic viewpoint. Training of additional technical personnel and the type of medical care and evacuation programs necessary to be considered in the view of the new developments of modern warfare, such as the atomic bomb and bacteriological warfare, were also discussed. Government representatives present included officials from the army, navy, air forces, U. S. public health, selective service, Red Cross and others.

Richard J. Meiling, M.D., secretary of the council, pointed out the need for the individual states to consider the appropriation of money through their legislatures to be certain that adequate plans are made. The conference also discussed the utilization of the medical profession should universal military training or a resumption of the selective service act be instituted by Congress.

Dr. Rountree reported to the council the progress that has been made in Oklahoma in this field as Governor Roy J. Turner has designated Commissioner Paul Reid of the department of public safety to act as coordinating officer. Following the Chicago session, a report was made to Commissioner Reid and present plans call for a more extensive recommendation to the state planning commission for the rendering of medical care.

NATIONAL HEALTH ASSEMBLY MEETS IN WASHINGTON, D. C.

The controversial National Health Assembly called May 1-5 in Washington, D. C., by Mr. Oscar R. Ewing, chairman of the Social Security Board, attracted approximately 800 persons, the majority of which were not doctors of medicine.

The conference was called by Mr. Ewing at the request of President Truman and was designed to map out 10 year health goals for the nation. Due to the fact that such a meeting was bound to produce suggestions from various organizations that might be in conflict with others, Mr. Ewing announced at the beginning of the assembly, that the conference would not adopt resolutions and that its entire work would be of an advisory nature to him.

Of approximately 800 registrants, about one fourth were physicians, the others were members of labor unions, farm groups, public health, etc.

The conference was divided into 14 sections with the largest attendance reported at the one on medical care. This was presided over by Dr. Hugh R. Leavell, public health department, Harvard University. President Truman addressed the conference Monday evening, May 3.

Representing the Oklahoma State Medical Association were James Stevenson, M.D., Tulsa, and Dick Graham.

“...pressure of the gravid
uterus mechanically
interferes...”

in pregnancy

“Constipation is the rule. The pressure of the gravid uterus mechanically interferes with the function of the small intestine and colon per se and also renders the act of defecation less efficient by its effect on the diaphragm, abdominal muscles and levator ani.”

—Bockus, H. L.: *Gastro-Enterology*,
Philadelphia, W. B. Saunders
Company, 1946, vol. 3, p. 999.

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ANNOUNCEMENTS

PROGRESS RECORDED IN BULLETIN

The first issue of the Membership News Bulletin of the Oklahoma Medical Research Foundation was mailed in April. With a membership April 16 of 5,500, the officials of the Foundation decided the time had arrived for a news bulletin to keep the members informed of the progress of the campaign. It is designed to bring notes of news about the progress of the campaign.

At the time of release of the first Bulletin, the following counties had reached their goals or exceeded their quotas: Oklahoma, Blaine, Ellis, Kiowa, and Kay.

OPHTHALMOLOGISTS ELECT PRESIDENT

Conrad Berens, M.D., New York, was elected president of the Pan American Association of Ophthalmology at the third Pan American Congress of Ophthalmology held in Havana, Cuba. The next Congress will be held in Mexico City in 1952.

CHICAGO SOCIETY OFFERS COURSES

Two postgraduate courses will be offered in September by the Chicago Medical Society. The first in hematology and neurology will be held September 13-18. The second, cardiovascular and respiratory diseases, is slated for September 20-25. Applications are now being received by the committee on postgraduate medical education, Chicago Medical Society, 30 North Michigan Ave., Chicago 2.

ASSEMBLY TO MEET IN SAN ANTONIO

The International Post-Graduate Medical Assembly of Southwest Texas will be held January 25, 26, and 27, 1949. Boen Swinny, M.D., San Antonio, is president and John J. Hinchey, also of San Antonio, is secretary.

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FOR SALE: Short wave diathermy, type A.S.W. No. 1441, A. S. Aloe Co., Ultra-violet ray, Dix Hay fever machine, proctology instruments, complete set of instruments of all kinds. Key A, care of the Journal.

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GET ACQUAINTED WITH HEALTH DEPARTMENT IS ADVISED

It is with hesitation that some people consider the spending of public money to prevent the occurrence of certain diseases. Often these same people are called upon to spend freely out of their own pocket to cure themselves or some member of their family who has fallen victim to one of these diseases.

A community jointly supports services which individuals could not possibly afford on a private basis. Some of these services are water and light, sewers, police and fire protection. Protection of the public health through an adequate health department is also one of these services. It is regarded as a part of good civic housekeeping.

City and county officials, with the support of their respective citizens must zealously guard the health program. The old proverb "an ounce of prevention is worth a pound of cure" is literally true in this respect. Parents should immunize their children early against diphtheria, whooping cough, small-pox and typhoid. All persons should have an annual physical examination including a chest x-ray. Early tuberculosis responds to treatment. Get acquainted with your health department. You will profit by it.—C. W. Arrendell, M.P., Ponca City, reprinted from the Health Department News Letter, April, 1948.



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1. If you feel sick, call your doctor at once. Don't wait for a serious illness to develop before you ask his help. The sooner he sees you, the more he can do to help you avoid a major illness.
2. Before you telephone your doctor, make a list of the questions you want to ask him. Have a paper and a pencil handy when you call, so that you may take down his instructions. This way you will save your doctor's time, and remember accurately what he tells you.
3. Answer your doctor's questions fully. A previous illness may not seem to you to have any bearing on your present condition. But to your doctor it might furnish a valuable clue. Tell him complete facts. Let him decide what is important.
4. Follow your doctor's instructions exactly. If he prescribes medicine, take it according to directions. Remember, a larger dose than that prescribed won't cure you faster. And it might be harmful.
5. Never use medicine prescribed for somebody else, or for a previous illness of your own. However similar your symptoms may appear to you, the nature of your illness may be quite different. Only your doctor can accurately diagnose your trouble and prescribe proper treatment.
6. If your doctor advises an operation, don't put it off. With modern surgery, modern hospital care, you seldom have reason to fear an operation.
7. The new medical treatments you read about in the popular press aren't likely to be news to your doctor. If your doctor has not recommended a new treatment to you, it is probably because there are still some questions about its value, some limitations not stressed in popular reports, or some factors in your case which would make the treatment undesirable or ineffective for you.
8. Don't ask your doctor to advise you about members of your family whom he himself has not seen. He cannot risk giving an opinion about a patient of whose condition he has no firsthand knowledge.

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HAVE YOU HEARD?

Perry Pratt, M.D., Ponca City, spoke on Family Life Education at Home and at School at the Parent-Teachers association meeting at Garfield School in Ponca City.

E. M. Loyd, M.D., has recently moved from Taloga to Harlingen, Texas.

C. E. Williams, M.D., Woodward, has been presented the Silver Antelope award for "outstanding service to boyhood." Dr. Williams received the award at a regional Boy Scout banquet in Fort Worth, Texas.

J. William Finch, M.D. and *Wilson Mahone, M.D.*, Hobart, discussed socialized medicine at a recent meeting of the Hobart Rotary Club.

Richard Shriner, M.D., Hobart, spoke to a group in Hobart recently when the film "The Problem Child" was shown at the high school auditorium. The film was sponsored by the Kiowa County Medical Society.

R. F. Ringrose, M.D., was guest speaker on Medical Research before a P.T.A. group in Guthrie.

C. S. Stotts, M.D., Pawhuska, led the discussion when the film "The Problem Child" was shown before the Osage County Medical Society, the Osage County Nurses Association and the Pawhuska Teachers Workshop class at a joint meeting there recently.

W. W. Mall, M.D., Ponca City, received a special invitation by the residents association of the Wilmer Ophthalmological institute of the Johns Hopkins hospital and university to attend the seventh clinical meeting there.

More than \$3000 was contributed in Heavener as a part of the purchase price of a building to be used as an emergency hospital by John H. Harvey, M.D. The agreement calls for the retention of the building as a hospital in the event Dr. Harvey should leave Heavener. Plans are to secure the services of another physician for the other office.

F. M. Adams, M.D., Vinita, superintendent of the Eastern Oklahoma hospital, attended the 20th annual convention of the Mid-West Hospital Association in Kansas City in April.

Safety and Health for Democracy's Children was *Louis N. Dakil's, M.D.*, topic when he addressed the Washington school P.T.A. at McAlester.

William B. Thompson, M.D., Walters, is now in Temple, Texas, where he will spend three years in association with a clinic there. *Willard McGraw, M.D.*, will occupy his office and take over his practice in Lawton during that time.

Veterans totalling 693 with non service-connected disorders in Missouri, Kansas, Arkansas and Oklahoma awaited hospitalization in December, 1947, the Veterans Administration reports.

MEDICAL SOCIETIES AROUND THE STATE

Garfield County

Management of Injuries to the Hand was the subject of the program when the Garfield County Medical Society met in April. Participants in the discussion were Raymond G. Jacobs, M.D., Waldo B. Newell, Jr., M.D., and W. P. Neilson, M.D.

Kay-Noble County

Howard B. Shorbe, M.D., Oklahoma City, spoke on Orthopedic Emergencies in the Aged at the April meeting of the Kay-Noble County Medical Society at Perry. J. R. Stacey, M.D., also of Oklahoma City, addressed the same group on Rheumatism in the Aged. Both lectures were illustrated by slides and x-ray film.

Tulsa County

The Tulsa County Medical Society met May 10 with The Intervertebral Disc Problem as the subject of the program. Jess D. Herrmann, M.D., Oklahoma City, was guest speaker. It was the last meeting of the Tulsa County Society until September 13.

Creek County

The discussion was on peptic ulcer when the Creek County Society met in April at the offices of the Creek County health department. Seven physicians from Sapulpa and Bristow were present.

Oklahoma County

Public Relations was the program topic when the Oklahoma County Medical Society met March 23. Presented as a panel discussion, speakers were John F. Burton, M.D., Paul B. Champlin, M.D., C. E. Northeutt, M.D. and Dick Graham.

25 YEARS AGO

(Editorial Notes—Personal and General)

Dr. Orange W. Starr, Drumright, has been appointed city physician.

Dr. J. A. Marrow, for many years located in Sallisaw, has moved to Durant.

Dr. J. H. Plunkett, Wagoner, is spending a month at Tulane Medical School, taking up postgraduate work.

Dr. A. W. Tolleson, Eufaula, underwent a surgical operation in Muskogee in April, and has made a nice recovery.

Dr. C. M. Bloss, Okemah, visited Chicago and New York Clinics in April. Dr. Bloss is specializing in x-ray technique.

A group from Oklahoma City will have a building devoted exclusively for the use of physicians and dentists. The enterprise is headed by *Dr. J. S. Pine*, Oklahoma City.

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OBITUARIES

Kenneth J. Wilson, M.D.

1891-1948

Kenneth J. Wilson, M.D., Oklahoma City, died of cancer in his home at 1518 N.W. 37th. He was 57 years old. He was graduated from the University of Oklahoma Medical School in 1916 and had practiced medicine in Oklahoma City since that time.

Dr. Wilson, who is survived by his widow, three daughters and two sons, was a member of the Oklahoma club and the Methodist church. He was also a member of the Doctor's Dinner club, Oklahoma Obstetrical and Gynecological Society, S.M.A., the State and County Medical Associations and the Oklahoma City Clinical Society.

Hillard Lindley, M.D.

1856-1948

H. Lindley, M.D., pioneer Hollis physician, died at his home April 28 after having been ill since December, 1947. He had practiced medicine in Hollis county since 1901.

Dr. Lindley is survived by his widow, one daughter, six grandchildren, five great grandchildren and two great-great grandchildren and one brother.

E. L. Cohenour, M.D.

1884-1948

Elmer Ledley Cohenour, 63, Tulsa, died April 6 after an illness of several weeks. The Tulsa urologist had been in practice there since 1909.

Dr. Cohenour was graduated from Northwestern University Medical School at Chicago in 1907. He was a member of the Rotary Club, several Masonic organizations, and other civic and medical groups. Survivors include the widow, two sons and one daughter.

Wade Mitchell, M.D.

1881-1948

Wade Mitchell, M.D., formerly of Yale, died at the home of his daughter in Los Angeles about April 15. He had been in ill health the past two years and was preceded in death by his wife who died one month ago. Three daughters survive.

RESOLUTION

WHEREAS, the members of the Tulsa County Medical Society have been saddened by the passing of Dr. Elmer Ledley Cohenour on April 6, 1948, and

WHEREAS, the Society wishes to take note of the achievements and contributions of this practitioner of medicine during forty years of service to his fellow men, and

WHEREAS, the Society desires to express to the members of his family, and his many friends, its profound sympathy at his passing, Now Therefore,

BE IT RESOLVED: That the Tulsa County Medical Society take formal recognition of the services to medicine and to the general public of Dr. E. L. Cohenour, that it pay its respects to this departed physician for his interest in the progress of the community and organized medicine during his lifetime, and that it convey to his survivors and friends are deepest sympathy of the Society at his passing.

Copies of this resolution to be forwarded to the Oklahoma State Medical Association and the members of the immediate family.

Respectfully Submitted:

Welfare Committee

M. V. Stanley, M.D., Chairman

Approved by the Tulsa County Medical Society
April 26, 1948

THE MEDICAL SCHOOL

Byron Louis Bailey (Med '47) will begin a residency at St. John's Hospital in Tulsa on July 1, 1948.

James William Clopton (Med '45) is employed temporarily by the Oklahoma State Health Department to work at the West Oklahoma Tuberculosis Sanatorium, Clinton. He plans to serve a residency in Eye, Ear, Nose and Throat at University Hospitals, Oklahoma City, starting September 1, 1948.

B. O. Coleman, (Med '47) is serving a three year residency in surgery at the Kansas City General Hospital, Kansas City, Missouri.

Robert Duran, (Med '47) will begin a residency in pathology at the St. Elizabeth Hospital in Lafayette, Indiana, soon.

Thomas H. Fair, (Med '47) will be at St. John's Hospital, Tulsa, beginning July 1, 1948.

Edward M. Fugate (Med '47) has a Fellowship in Surgery for 1949 at the Receiving Hospital in Detroit, Michigan.

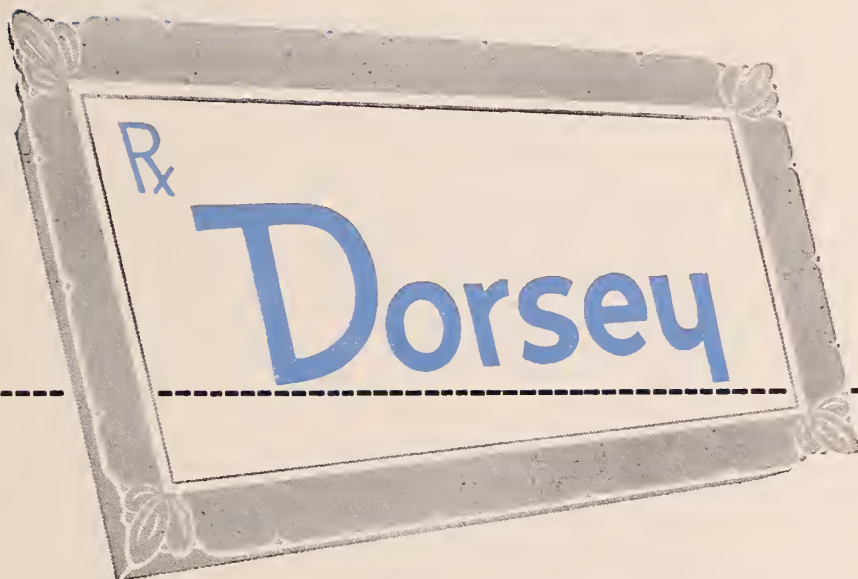
Douglas E. Wilson, (Med '47) now at Indiana University Medical Center, will be a resident in surgery at St. John's Hospital, Tulsa, after July 1, 1948.

C. Jack Young, (Med '47) will be taking a residency in Dermatology and Syphilology at the University Hospital, Charlottesville, Va.

E. W. Young (Med '47) will be Assistant Resident in Medicine, Mercy Hospital, Baltimore, Maryland, for the year 1948-1949.

Martin Berger, (Med '47) will be a resident in Surgery for the year 1948-49 at Providence Hospital, Seattle, Wash.

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BOOK REVIEWS

400 YEARS OF A DOCTOR'S LIFE. George Rosen, M.D., and Beate Caspari-Rosen, M.D. 429 pages. Price \$4.00. New York: Henry Schuman, 1947.

In this significant anthology we find a composite picture of the successful doctor and the varied influences which mold his life and shape his character. The reader through a careful cohesive integration of the contents of this volume may build up an ideal toward which he may direct his own life with great expectations.

Particularly should the young doctor, whose career is still uncharted or vaguely projected, read this stimulating composite account, containing many interesting facts about the multifaceted life and work of the Doctor through 400 years of medical progress in an ever changing world. In this well arranged volume the authors have presented many revealing facts and intimate experiences in connection with "the most human of all professions."

Here one finds what creates the spirit, what moves the mind and directs available human energy toward scientific progress in behalf of human weal.

In a personal word to those who see this review may we say that after a hard day's work, while wondering "why patients get this way" it will be helpful to pick up this book and spend a little time trying to figure why doctors continue in their difficult pursuit which fixes the pattern of the doctor's life and makes him like it. Here we find more than a hundred case histories dealing with doctors who have helped to bring medical history through 40 decades. The volume is attractive, well-printed, easy to handle and well-adapted for periodic browsing; in fact it is good for bedside perusal; a satisfying night-cap. Purchase it, read it and keep it.—Lewis J. Moorman, M.D.

PHYSIOLOGY OF EXERCISE. Laurence E. Morehouse, Ph.D., and Augustus T. Miller, Jr., Ph.D., 353 pages illustrated. St. Louis: C. V. Mosby Company, 1948.

The authors state "an attempt has been made to provide the essential physiological background which is necessary for an understanding of the response of the body to exercise." They have assumed that the reader possesses "only an elementary knowledge of some of the basic principles of chemistry and physics." Unfortunately they do not state for what class of readers it is intended.

The functions of muscles are interrelated to the entire subject of physiology; therefore it is difficult, if not impossible to give an adequate discussion of the physiology of exercise without including the physiology of all the other organs and systems. The authors have made a sincere effort to stress the knowledge intimately related to muscle physiology and the book should prove valuable to college students interested in physical education.

The material presented is elementary and for the most part it is essentially the same as included in the various text books of physiology, also almost all of the numerous illustrations have been taken from various standard text books. The 357 references offered do not reflect an emphasis on modern literature, references are listed for each year since 1903 (with the exception of 1908, 1916, 1918) and one dated 1898 is included.—Edward C. Mason, M.D.

OPERATIVE GYNECOLOGY. Harry Sturgeon Crossen, M.D. and Robert James Crossen, M.D. Sixth Edition. 999 page. 1334 illustrations, 12 color plates. St Louis: C. V. Mosby Company, 1948. Price \$15.00.

This practical textbook of "Operative Gynecology" now appears in its sixth edition. It has been completely revised and evidences marked improvement both in style and order of presentation of its contents.

A great deal of vital information has replaced much space occupied in previous editions by interesting historical matter. The inimitable personal touch in discussing operative conditions and indications for surgery has been maintained.

The major changes observed by this reviewer focus attention upon two outstanding advances in operative gynecology: the prevention of cancer in certain organs, and the development of effective palliative treatment for uterine myomata in patients with serious handicaps which more or less preclude hysterectomy. Cancer prevention is emphasized by the authors in recognition of two major premises: first, that local conditions which may increase the chance of malignancy should be removed, and second, that involuting ovaries and uteri present increase in cancer potential which is a factor to be considered when making the decision between operative removal and less radical measures. The treatment of genital cancer by means of radiation, irradiation, and surgery and with combinations of each, has been exceptionally well presented.

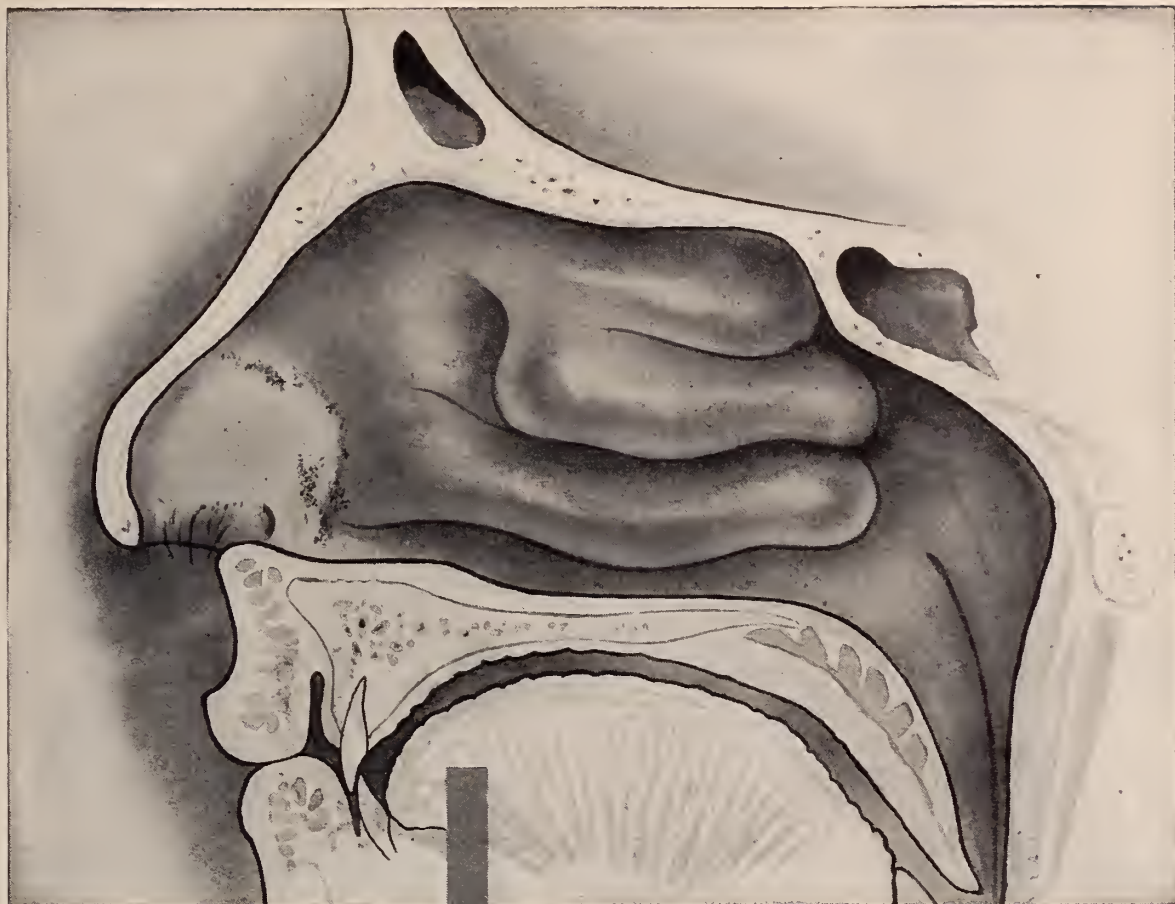
It is hoped that in future editions many of the 1,334 illustrations will be replaced by more clear cut diagrammatic drawings of surgical procedures.

It is the opinion of this reviewer that Crossen's sixth edition of *Operative Gynecology* remains one of the two most practical texts on the subject, both as a reference for the gynecologist and as a practical guide for the general surgeon.—Gerald Rogers, M.D., F.A.C.S.

MANUAL OF CLINICAL THERAPEUTICS. Windsor C. Cutting, M.D., Professor of Therapeutics, Stanford University School of Medicine. Second Edition. Cloth. 712 pages. Philadelphia: W. B. Saunders Co. 1948.

This is a well written book that contains a remarkable amount of material in condensed form. It should prove useful especially to medical students, hospital officers, and beginning practitioners as a quick reference.

The newer significant improvements in therapy are included in this revised edition. This is particularly true of the infectious diseases where the new antibiotics, anti-malarials, and other chemotherapeutic agents have often simplified treatment to a revolutionary degree. Other considerable changes have been possible through the introduction into therapeutics of such agents as anti-histamines, antithyroid drugs, new anticonvulsants, folic acid and fractions of protein. The sulfonamides, penicillin, and streptomycin, are discussed briefly but adequately. The first part of the book deals with general considerations in therapy common to many diseases. The larger portion of the book is concerned with the treatment of nearly all of the diseases seen in general practice; each disease is listed separately and the therapy is discussed under the three headings — general measures, specific measures, and prevention. The last 150 pages (appendix) of this manual contain numerous facts, techniques, and procedures which should prove quite helpful to the interne.—J. S. Morrison, M.D.



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YOU AND YOUR DOCTOR. Benjamin F. Miller, M.D.
New York: Toronto: Whittlesey House McGraw-Hill
Book Company, Inc. 1948. \$2.75.

Starting with the philosophy that the biggest fool in the world is the fool who thinks everybody is wrong who doesn't agree with him, the reviewer has carefully read this naive bit of hodgepodge plainly revealing the author's ignorance of both "You and Your Doctor."

Having become a clinical professor of medicine through the sequestered channels of research, the big city clinic and the U. S. Public Health Service does not qualify the author to speak for you or your doctor. You, Mr. Average American Citizen, never appeared among his bacteria in the laboratory; you never sought his services in the big city clinic. You never came personally under his scrutinizing public health service. His obvious aloofness from your needs and your problems appears on every page and disqualifies him as your spokesman. That he is equally unfamiliar with your doctor and his services to you appears in every chapter and in every unjust criticism, every attempted analogy, every rare case history, every ridiculous story with unwarranted conclusions in favor of group and government practice. His ignorance of the functions of the average general practitioner is accentuated by his proposal of what he chooses to call the "pilot physician." After finding the general practitioner guilty of so much ignorance and so many shortcomings, it seems passing strange that the duties he would assign to his "pilot physician" are the identical services performed by the average general practitioner under the present system of medical service.

It is difficult to understand how the author expects even the lay reader to believe that he as a second year medical student could diagnose a neighbor boy's disease which would be utterly beyond the diagnostic acumen of the average general practitioner with four years schooling plus practical experience. As he progressed in school his diagnostic perspicacity grew as attested by his own admission of controversies with his professors about diagnostic problems. According to his opinion our educational system is so deficient we wonder how he learned so much and how he can now be so sure of himself. But he forgets himself long enough to opine that "Advanced mathematics are not needed to prove that a more democratic method of medical and education and opportunity would give us a chance to produce a Pasteur or an Ehrlich more often than once in fifty years."

Those of us down at the grass roots know that already New Deal government controls, such as he wants for medicine, have made it impossible to produce a good farmer and let him live on the soil in peace. The leveling process he seeks pulls down the peaks without perceptibly elevating the plateau. Occasionally a man is born with something in his genes which might lift him up to the level of a Pasteur or an Ehrlich if his pants had not been made in to a straightjacket. The Bismarckian policies originally incorporated in the Wagner-Murray-Dingel bill by Bob Wagner of Nastatten, Germany, ultimately made mass murderers of many of Hitler's doctors, how can we expect the same policies to make angels of us. Already according to the author, our general practitioners are seasoned sinners. This harmless looking little volume with a cunning title is full of absurd stories and case reports leading to false inferences.

Change of climate is advocated apparently with transportation and an allowance. What would old Horace

Gracely say to this one—"Go west young man, and enjoy your subsidy."

It would be unfair to say there is no truth in any part of the book but it is only just to say where truth appears it is employed for the purpose of posing unwarranted premises and cinching unjustifiable conclusions.

The author's ego never misses a page. As the intelligent reader follows this farce, not with the hope of edification, but with comedy as a sure reward he is not surprised that before the last curtain he boldly proposes to resolve all our medical problems through the Wagner-Murray-Dingel bill. The comedy leaves a bad taste because it makes no disposition of all the incompetent general practitioners. Knowing there are not enough doctors to implement the plan without these general practitioners consistently damned throughout the comedy and left to our imagination we must conclude the Wagner-Murray-Dingel bill can guarantee "good health . . . throughout your life" and that the government red-tape-worms who administer this miraculous law will be able to assimilate these medical derelicts and through the process of symbiosis, spew them into a golden thread of truth which will bind up all our wounds and heal our ills. This harmless looking volume with a chummy title is full of absurd assumptions and case reports followed by false conclusions.—Lewis J. Moorman, M.D.

DISABILITY EVALUATION: PRINCIPLES OF TREATMENT OF COMPENSABLE INJURIES.

Earl D. McBride, M.D. Fourth Edition. Philadelphia: J. B. Lippincott Company, 1948.

The accurate evaluation of disability is admittedly one of the most difficult problems with which industrial and orthopedic surgeons are faced. In an effort to formulate a standard basis for disability evaluation, Dr. McBride has developed a method based upon the functional effect of a physical handicap on the ability of the patient to perform his work. The following factors have been selected as determinants: (1) quickness of action, (2) coordination of movement, (3) strength, (4) security, (5) endurance, (6) safety, and (7) physique, the latter factor being the prestige of a normal physique in securing and pursuing employment. These are considered in relation to a given physical handicap and, depending upon the degree to which each factor is involved, an estimate of disability is reached.

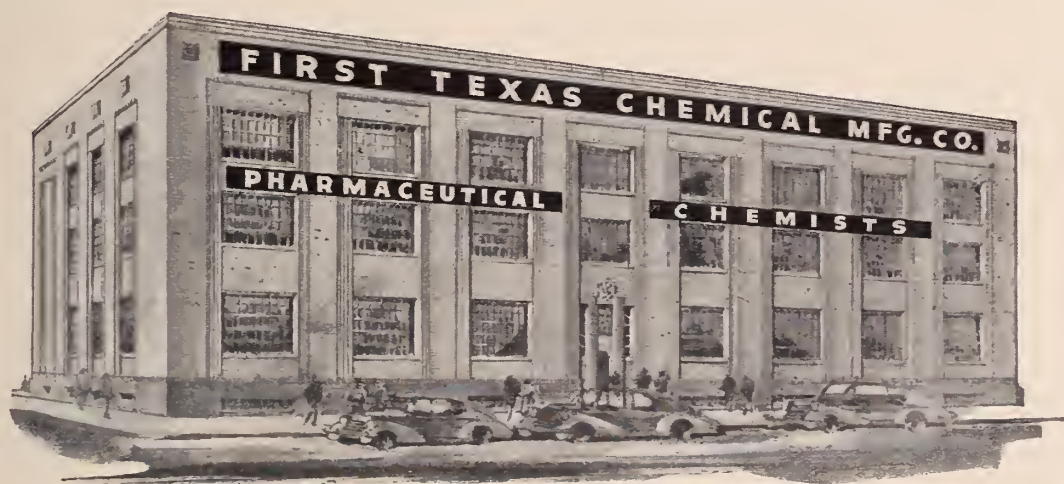
The current edition, issued after a lapse of six years since the third edition, represents an up-to-date presentation of the problem. That the author has remained abreast of current sociological trends in regard to compensable injury is manifested by the inclusion of a new chapter on "Employment of the Physically Disabled." There are numerous other changes and additions, but Dr. McBride has wisely refrained from enlarging the volume, so that except for the new chapter, pagination remains the same as in the previous edition.

This book represents an amazing account of work on the part of the author. However, it is not a book which can be effectively utilized without a thorough study and understanding of the principles upon which the calculations are made. Though the physician experienced in disability evaluation may not always agree with the rating arrived at by this method, it is a definite and rational effort to establish a greater degree of uniformity among various examining physicians, reached by a systematic approach rather than by mere guess.

The current edition continues to be an important tool for physicians who must evaluate disability.—Robert A. Knight, M.D.

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MEDICAL ABSTRACTS

THE TREATMENT OF TRAUMATIC DIPLOPIA. J. C. Neely. The British Journal of Ophthalmology, 31:581-642 (October) 1947.

The article is the result of investigation carried out in the Royal Air Force of Great Britain. Traumatic diplopia is not uncommon even in peacetime. It is thought, however, that the condition cannot be cured. This is one reason why the surgery of the vertical and oblique muscles of the eye has remained so undeveloped.

Traumatic diplopia may be divided into three categories: 1. Diplopia caused by the alteration in the seating of the eye, and the mechanical embarrassment under which certain movements have to be made, 2. diplopia due to injury of the muscles themselves by direct or indirect violence, and 3. diplopia due to paralysis of an extra-ocular muscle, following damage to its motor nerve by intracranial injury.

Before any specific treatment can be undertaken it is necessary to make an accurate diagnosis. Identification of the affected muscles is essential for correct treatment. This is sometimes the matter of considerable difficulty, especially when secondary contracture of the direct antagonist muscle of the same side has already occurred, leading to a relative paresis of the synergist of the other eye.

The next step in diagnosis is the observation of the ocular movements. The nature of the diplopia, whether it is horizontal or vertical in character, crossed or homonymous, will also indicate which movement of the eyes causes the greatest separation of the images. Two observations can be made: 1. The limitation of movement of the affected eye, 2. the overaction, during the same movement, of the sound eye. When the ocular movements are made, the diplopia will be found to be the greatest in the direction of action of the paralyzed or paresed muscle, and the more displaced image will be found to belong to the affected eye.

The muscles at fault having been diagnosed it is then necessary to measure the amount of diplopia in order to be able to observe any recovery that may be taking place, and to assess the results of treatment. For this purpose one uses the Maddox rod, the Hess screen and the synoptophore.

For the treatment of traumatic diplopia it is necessary to restore the normal anatomy of the parts after a head injury, and, before the surgical correction of diplopia is undertaken, orthoptic treatment is begun. The orthoptic treatment is included also in postoperative management of the diplopia cases. It has been found that there is a residual weakness in the eye muscles after diplopia operation without a preceding series of orthoptic exercises.

The operation is not considered until five-six months have elapsed since the date of the injury. Many operative procedures are possible and may be considered successful if judged in terms of ocular comfort and the disappearance of diplopia in the primary positions of the eyes.

There are 12 extraocular muscles which have to work together in harmony to maintain binocular single vision. Operations which equalize the balance of power in the line of action of the paralyzed or paresed muscles are obviously better solutions from the mechanical point of view than those which try to adjust this balance diagonally to the line of action of the affected muscle.

(Continued on Page xix)



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THE JOURNAL

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OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

THE PHYSICIAN AND THE PRESS

When the newspapers carry stories unfavorable to the medical profession, there is a strong probability that the profession or one or more of its members have been out of line. Some provocation for the hard-pressed reporter who is always prowling around in the neighborhood of news evidently inspired the story. The routine, traditional good pursued by the medical profession since the days of Hippocrates is not news. The uncommon departure from this course causes unfavorable publicity and stimulates the news hounds.

Organized medicine should so condition the non-conformist in its ranks that they will either walk the straight and narrow path or get out of the fold and follow some business where crooks are tolerated.

It should be remembered that most reporters are mere human beings working under pressure to meet publication deadlines and that they are sure to manifest their average quota of human errors. After allowing for this and making reasonable attempts to establish the truth, the medical profession should look for the real culprit among its own membership and bring him to trial. It is said that the late Mr. Ochs owned not only the New York Times, but a daily newspaper in Chattanooga, Tenn. On one occasion an irate subscriber stormed the Chattanooga office and demanded immediate redress because of a story carried in the paper which reflected upon his integrity. Sparring for time and warding off calamity, the gentlemen in the editorial department said, "I am sorry but Mr. Ochs who owns the paper is in New York."

The injured subscriber retorted, "I do not want to see the ox that owns the paper. I want to talk to the ass who wrote the article."

We should not be too interested in the reporter whose business it is to gather the news but we should apprehend the jackass who bit the dog!

NO HEDGING

In an impromptu address before the Oregon State Medical Association Governor Dewey minces no words. He admits that before conducting an exhaustive investigation he looked upon government control of medicine as a hopeful possibility. But after spending \$200,000 of the people's money he found such a plan utterly hopeless.

In this address he said "By the time I was half-way through it I was thoroughly convinced, beyond a shadow of my possible doubt, that compulsory medical care was unworkable, that it would bankrupt our society and destroy the standard of medical care in our nation, and it would be the greatest catastrophe in the United States.

"Then we got the rest of the research on what happened in other places where it had been tried. I had felt all along that if there was any merit to this thing it could be done and should be done on a state level and kept close to the people and we ought not to use one hundred and forty-five million people as guinea pigs. We ought to use it on a small level, and if it failed abandon it, and then we got the research. We got the Saskatchewan program, the New Zealand program and the Australian program and it was absolutely clear on the record that every time they tried to compel people to pay a certain sum to government for medical care they destroyed the medical care they were to receive. . . . I don't want to run the risk of happening to the health of our people what has happened to the health of every group of people which has tried to drag the medical profession down to the Socialists level. You won't drag anything up. You will enlarge the volume of medical care but utterly destroy the quality of medical care the minute you try that process."

Such forthright declarations deserve serious consideration. If the Federal Government would make an honest investigation instead of staging an outright crusade we might have time to get down to business and take care of the sick.

THE STATE MEETING

The 1948 meeting of the State Medical Association was the largest in the history of the Association. It would be unfair to attribute this large attendance to any one factor. No doubt much credit should go to the well-integrated services of the Association officers and the committees, clearing through the Council and House of Delegates. Yet these services could not be coordinated and properly integrated if it were not for the guiding hand of the Executive Secretary and the efficient and harmonious efforts of his co-workers at the Association headquarters. The industry and loyalty displayed by the Association's employees in this office deserve the highest commendation.

In behalf of the membership, it may be justly said that only the highest ideals could annually bring up the attendance upon meetings designed to prevent, shorten and cure disease and thus to curtail the demand for medical services. In the course of events, as shown by the evolution of medicine, physicians are constantly striving to diminish sickness and suffering at their own expense, in that success lessens the need and the duration of individual medical service.

To those who serve on the Council and in the House of Delegates everlasting credit should be given because of the fact that the members of these two governing bodies can come together from all sections of the state with widely divergent opinions and ultimately cause their wise deliberations to smoothly cut through the most dangerous controversies and arrive at harmonious conclusions in behalf of a common cause. All who give whole-hearted support deserve this tribute; Excelsior!

TO DATE ON STEPTOMYCIN IN THE TREATMENT OF TUBERCULOSIS

The following brief statements are based upon recent personal discussions with those in charge of clinical trials, upon correspondence with the chief of Tuberculosis Division, VA central office and the minutes of the Fourth Streptomycin Conference of VA. Reports from the two latter sources indicate that one gram seems to be as effective as two grams a day and the daily dose given in two injections as effective as when given in five doses. The smaller the daily dose and the less frequent the injections, the less danger of toxic effects.

Many of the clinical observers believe that one-half gram daily in one or two doses is

quite as effective as the larger amounts given in five doses. Visible lesions such as discharging sinuses and skin lesions are responding to 0.2 of a gram daily. Eighty to 90 percent of the treated patients have shown improvement.

The commonly accepted period of continuous treatment is 120 days.

This greatly abbreviated statement will suffice to show the changing picture and stress the wisdom of the conservative releases in the past and the need of continued study and cautious observation.

"SO LONG AS THEY ARE FREE"

George Washington on one occasion when critically ill and wondering what would become of the nation in case of his death said "I have great faith in the people so long as they are free."

The progress of medicine as a free enterprise affords one of the best examples of what individual initiative and freedom of action can do to advance the cause of human weal.

Government usurpation of personal liberty is national suicide. This has been the common fate of democracies. When medicine submits to coercion, death is not far away.

NO RESPITE

Repeatedly the readers of the Journal have been reminded of the Oklahoma Medical Research Foundation. It is difficult to understand how any member of the State Medical Association can afford to live on without a part in the conception, birth, and life of this commendable undertaking, which will immortalize all who participate. Such a lofty purpose cannot fail. Already its scientific and spiritual aspects are evident and its physical presence is assured. The Research Institute will stand as an outward expression of an inward grace characterizing the professions and all the people who have participated. Even the widow's mite may ultimately accentuate the scientific light. Even the Roentgen ray was first seen as a faint fluorescent flicker in the dark. The research worker is giving his life. This may be our last chance to share his opportunities; and to make our lives more luminous. Let us hope that nature's still hidden secrets may yield to our increasing knowledge, our perfected tools and our modern facilities.

SCIENTIFIC ARTICLES

EPIDEMIOLOGY AND TREATMENT OF POLIOMYELITIS*

FRANKLIN H. TOP, M.D., F.A.C.P., F.A.P.H.A.

DETROIT, MICHIGAN

Anterior poliomyelitis is an acute, infectious and communicable disease which in a recognizable form affects the central nervous system and frequently causes weakness or paralysis. The recognizable disease is probably only a small fraction of the total, for evidence would seem to indicate that poliomyelitis is as common an infection as measles but unlike measles only a small proportion of the infections are apparent.

EPIDEMIOLOGY

Relatively little is known concerning the epidemiology of poliomyelitis, largely because of the lack of a suitable, inexpensive and readily available experimental animal. This has resulted in opinions derived from field observations and from laboratory studies generally based on experiments which include a relatively small number of animals. The result has led to theories largely based on inference, and in consequence there are differences of opinion regarding various phases of the epidemiology of the disease. What is presented in this paper concerning the epidemiology of poliomyelitis then is not a consensus but rather the considered opinion of the author based upon what seems to him to be most consistent with the observed facts.

The infectious agent is one of the smallest filterable viruses, its estimated size by ultracentrifugation being 10 uu (millimicrons). There are numerous strains which are capable of producing poliomyelitis. The virus has been purified, is resistant to ether and phenol, and is readily destroyed by oxidizing agents and ultraviolet rays.¹ Concentrations of chlorine generally used in the purification of water supplies do not destroy the virus,² but "breakpoint" chlorination presumably does.³ The virus is inactivated by heating to 50°C. for half an hour and is resistant to drying and freezing.

The nerve tissues of man are principally

affected and the virus is not readily obtained from the blood or spinal fluid. Little is actually known concerning the behavior of the virus in humans and many suppositions are based on behavior in animals. Poliomyelitis virus was isolated from human stools in 1938,⁴ and since has been found in the stools of recognized cases and contacts.^{5 6 7} Isolations of virus have been less frequent from the nasopharynx^{8 9} and tonsils.¹⁰ Flies caught wild in epidemic areas have been found to harbor the virus,¹¹ although there is little evidence that virus persists in them for long or that multiplication of virus occurs.¹²

Prevalence. Poliomyelitis has been reported from many parts of the world though in its recognizable form it is essentially a disease of the temperate zone. The incidence is both sporadic and epidemic with sizable outbreaks reported from Europe, Australia, New Zealand and the United States. If a country is large, it is unusual to find the occurrence general. Clinically recognizable poliomyelitis is not common, for during endemic periods the morbidity rate is roughly three per 100,000 of the population while in an epidemic year the number of individuals affected has varied between one and three per 1000 of the population.

Age. Poliomyelitis is for the most part a disease of children with more than two-thirds of cases under the age of 10. There has been of late an increase in the number of teen age and adults affected and an increasing proportion of patients with paralysis are being found in the ages above 10 years. Rural areas have usually shown a higher proportion of teen age and adult cases than noted in urban communities.

Sex. Males are affected more frequently than females, and the ratio is roughly three to two.

Race. Until recently it was thought that colored persons were less susceptible than

*Presented before the General Session of the Oklahoma State Medical Association at the Annual Meeting, May 19, 1948.

the white at least in terms of recognizable disease. However, studies carried on in cities with a fair proportion of Negroes in the population would indicate that case incidence is perhaps less dependent upon color than upon the vagaries of chance with relation to the districts in the city affected. Poliomyelitis is not found in all sections of the city in like numbers during an outbreak.

Climate and Season. The disease has been reported throughout the world and cases have been notified from the arctic regions and from the tropics, but the majority of apparent cases occur in the temperate zones. Reported cases usually occur in the United States in the late spring, summer, and early fall, depending upon the latitude, the cases in the northern states appearing somewhat later than those in the southern states. Outbreaks have been recorded throughout the year, and it is not unusual for an occasional case to occur during any or all of the winter months, particularly after an outbreak the previous summer and fall.

Miscellaneous Factors. A number of factors have been considered as having an influence on the occurrence of poliomyelitis and a few of them are discussed here. *Economic status* appears to have no demonstrable effect on the incidence of poliomyelitis except that when the children of the well-to-do were more sheltered than at present, the age at which poliomyelitis appeared in children of these families was somewhat later. This might also be said to be true of other common communicable diseases, for segregation in childhood does appear to defer the occurrence of childhood diseases. *Stress.* Epidemiological observations have led some to consider the role that stress plays in the disease. In a study¹³ of this factor among cases and controls it appeared as if there was a definite relationship but proper assessment was difficult. Recent experiments on monkeys¹⁴ seem to bear this out in that exhausting exercise, chilling and summer temperatures increased the incidence and severity of paralysis in monkeys submitted to these factors in comparison to controls. *Body type* was considered at one time as a factor but has received little attention lately. *Dietary* deficiency and avitaminosis have been experimentally studied in relation to poliomyelitis. Deficiency in essential food elements including vitamins leads to a decrease in natural resistance to bacterial diseases, but there is controversy regarding this with relation to antiviral resistance. It

has been found that a diet deficient in Vitamin B protects mice against experimental poliomyelitis infection, and the reason is not readily apparent, but it is possible that the nutritional or vitamin requirements of the virus are greater or more fixed within narrow limits than that of body cells, so that decreased caloric or vitamin intake would affect the virus sooner than the host, resulting in apparent if not real host resistance. The effect of vitamins C and D are definitely controversial. *Pregnancy* and its incident endocrine changes is considered by Aycock¹⁵ to enhance susceptibility to poliomyelitis. *Tonsillectomy* and *adenoidectomy* or any operation about the nasopharynx has been stated to predispose an individual to poliomyelitis. In a review by Aycock¹⁶ the evidence is worthy of consideration. It is difficult to obtain valid information which would pass statistical criteria. From our studies over a period of 10 years there is no evidence that the incidence of clinically recognizable poliomyelitis is greater following tonsillectomy than its occurrence among the non-tonsillectomized but when the disease does occur the clinical type is severe in the vast majority of instances. Further, a very high proportion of patients with the bulbar and spinobulbar types of the disease have had tonsils or adenoids removed at some time in life and not just prior to appearance of the disease.

Transmission. The *reservoir of infection* is human as far as can be ascertained, for animals are not as yet known to harbor the infection under natural conditions. Both cases and carriers harbor virus, but the relative importance of either is not fully known. Discharges from the nose, throat and stools in cases and from stools in contacts or carriers contain the virus. The exact mode of spread or portal of entry is unknown. The disease appears to be spread by human contact,^{5 6 7} and the virus probably enters the body by way of the mouth, perhaps occasionally by way of the nose through person to person contact and less frequently as the result of contact with contaminated food or materials. Though the virus has been found in flies subject to fecal contamination there is no clear-cut evidence that this is the natural mode of spread, although under certain conditions theoretically possible. Reliable evidence of spread by water supply is lacking.¹⁷ It is likely that a number of modes of transmission are possible as Howe and Bodian¹⁸ have suggested.

The period of *communicability* is not definitely known. The patient is probably infectious during the latter part of the incubation period and for several weeks after the onset. The virus is present in stools for a number of weeks as Horstmann, Ward and Melnick¹⁹ have demonstrated. Virus has not been as readily obtained from the oropharynx, and persistence studies have been meager. The role of carriers with relation to spread of the virus and the relative roles of cases and carriers is still problematical.

Susceptibility and Immunity. Children appear to be more susceptible than adults, at least in urban areas. If the concept that poliomyelitis is a highly infectious disease which manifests itself clinically only occasionally is correct, then adults, particularly in urban areas, should show antiviral or protective antibodies which inhibit the virus. This has been demonstrated in the adult population as well as in recovered cases. In addition it appears that the proportion of persons whose blood contains antibodies increases with age. There are undoubtedly other factors that determine susceptibility, and some of these have been mentioned under the heading "other factors" above. *Immunity.* An attack of the disease apparently gives immunity although second attacks have been reported, probably because of the multiplicity of strains.

CLINICAL MANIFESTATIONS

Before considering treatment it is well to briefly consider the clinical course of poliomyelitis and the clinical types. The *incubation period* is not definitely known but the limits are likely between three and 20 days with the average five to seven days. The clinical course of poliomyelitis may be divided into three phases: namely, the systemic, the central nervous system, and the paralytic. All three phases are not necessarily encountered, for in many instances the systemic phase is absent or unrecognized, while very occasionally a patient suddenly develops paralysis without apparent prodromal symptoms. In the systemic phase the onset is fairly acute with headache, nausea and sometimes vomiting occurring along with a mild tonsillitis or pharyngitis. Moderate fever between 99° and 101° F. is encountered, and the period of illness lasts for 24 to 36 hours. Symptoms subside, the patient is much improved, and here the illness is terminated for the great majority who fall ill during a period when poliomyelitis is prevalent. Unless verified by epidemiological

and laboratory evidence such illness cannot be diagnosed as poliomyelitis, but it may be suspected and the patient isolated as such. After a lapse of two to four days a small number of individuals fall ill to the *central nervous system phase*, with symptoms of the first phase augmented or accentuated. Frontal headache is a fairly constant finding; vomiting usually replaces nausea, and the fever may be slightly higher. In addition, the patient appears more ill than the temperature indicates and has an anxious facial expression. Stroking of the skin is irritating and illustrates the marked sensitivity present. Excessive sweating or hyperhidrosis is commonly seen. Sometimes the clinical picture ends here with only an intimation of central nervous system involvement, but for others there is progression to stiff neck, stiff back or both, and often muscle pain or spasm. These signs and symptoms, along with positive spinal fluid findings, make the clinical diagnosis of poliomyelitis possible. The third or *paralytic phase* affects relatively few individuals and consists of involvement of nerve cells innervating muscles of the extremities and trunk, of the cranial nerves or occasionally of the brain or meninges.

Cases of poliomyelitis may be divided into *clinical types*, classified according to the presence or absence of paralysis and the part of the nervous system affected. The clinical types usually described are the abortive, nonparalytic and paralytic. The *abortive* type should be limited to first phase disease, occurring in the presence of known exposure to a case. There are undoubtedly many instances of this type, but they are not often diagnosed because clinically not determinable. A *nonparalytic* case is one with definite clinical findings and a confirmatory spinal fluid picture; weakness or paralysis is absent. *Paralytic* cases are those in which weakness or paralysis is found, and the following types are noted: spinal, bulbar, spinobulbar, encephalitic, meningitic, and ataxic. The *spinal* type consists of involvement of the spinal cord with resulting weakness or flaccid paralysis of one or more of the muscles of the trunk or extremities. *Bulbar* — One or more of the cranial nerves are involved in the bulbar type, causing strabismus, lid-lag, facial, palatal or pharyngeal paralysis. *Spinobulbar* poliomyelitis combines involvement of spinal nerves and one or more cranial nerves. *Encephalitic* — Occasionally the brain is involved to the exclu-

sion of other portions of the central nervous system. The diagnosis is difficult to make unless there is an epidemic or there is known exposure to a clinically apparent case either familial or extrafamilial. *Meningitic* — The meningitic type occurs infrequently and is difficult to diagnose except under conditions cited under the encephalitic type. *Ataxic* — Very occasionally overt evidence of disease is referable only to the cerebellum. Again as in the encephalitic and meningitic types the diagnosis rests on information concerning contact with a recognized case.

TREATMENT

The treatment of poliomyelitis may be divided into three periods — the acute, the early convalescent, and the late convalescent. *Acute period* — There is no specific treatment for poliomyelitis. Convalescent serum has been shown to be of no value therapeutically. In a carefully controlled study Bahlke and Perkins²⁰ demonstrated no benefit from the use of gamma globulin given intramuscularly to alternate patients with nonparalytic poliomyelitis. Although the virus of poliomyelitis can be inactivated by ultraviolet irradiation, Toomey and Takacs²¹ could not demonstrate modification of the disease in infected monkeys when blood was removed, irradiated and returned. Sulfonamides and antibiotics have been tried without success. Retan²² has advocated forced spinal drainage in treatment, but little can be expected from this method of "washing out" when the causative agent is an intracellular virus.²³

When there is pain or spasm in muscles, hot moist packs of the Kenny type are applied for relief but not in an attempt to prevent further extension of the process. All patients do not need them, for the mild spasm of back and hamstring muscles soon disappears, particularly in nonparalytic cases. There is noteworthy relief where pain or spasm is marked. After several weeks of packing, the effect may be less striking, and removal of packs for a few days or application of cold packs²⁴ results in improvement. Immobilization has largely been eliminated in recent years, although Toomey²⁵ has not used it for over a quarter century. As Solandt²⁶ states, "the fact that disease produced by skeletal fixation results in a wasting which develops as the atrophy of denervation argues that splinting should be used with caution." Instead of immobilization, restricted physiotherapy in the form of passive movement and tendon stimulation is done to

keep innervated muscle in as good condition as possible and to prevent atrophy of muscle which has temporarily lost its innervation. If the anterior horn cell is destroyed, re-innervation does not take place, and no method of treatment will alter this, but physiotherapy should continue until there is no reasonable chance of return of function, which in some instances is as long as a year and a half. The importance of early institution of physiotherapy has been stressed by Ober,²⁷ who calls attention to the fact that unrelieved pain and spasm may lead to deformities in the early stages and that early application of packs and physiotherapy results in the disappearance of deep tenderness and muscle spasm, flexibility of joints comes on rapidly, and it becomes possible to begin muscle re-education earlier.

TREATMENT OF CLINICAL TYPES

Nonparalytic cases should be observed carefully for possible development of weakness or paralysis, and a muscle check should be made prior to dismissal. Spinal cases need careful assessment by muscle check and affected parts examined for marked spasm or flaccidity. Hot moist packs should be given as indicated and physiotherapy begun. Immobilization should not be done.

The *bulbar* case demands special care, depending upon the degree and extent of involvement. Certain paralyzes need no special attention, such as the extrinsic and intrinsic muscle paralysis of the eye and facial paralysis. The same is true of unilateral or mild bilateral palatal paralysis. Severe bilateral palatal or mild pharyngeal paralysis necessitates small mouthfuls of food and caution on swallowing. Bilateral involvement of the pharynx demands the presence of nurse or attendant while eating or drinking. In severe cases it will be necessary to tube feed by means of an indwelling Levine tube. There should be postural drainage to rid the pharynx of mucus which cannot be swallowed by the patient; the foot of the bed should be elevated 10 to 12 inches by using high foot blocks. Constant nursing care should be available, if possible, and an adequate mechanical suction apparatus should be at the bedside for gentle aspiration of collected mucus. Occasionally the patient is so restless that rest or sleep is impossible, or secretions so bothersome that constant bedside care is necessary but impossible. Under these circumstances a tracheotomy may have to be resorted to. The result is usually dramatic unless there is progression of the disease.

There is a hazard to the procedure, and it should not be lightly undertaken. This procedure is no solution to cyanosis incident to circulatory or respiratory failure which is central in origin. Dyspnea and cyanosis may be the result of obstruction of the pharynx with mucus, and this can be remedied by proper and frequent aspiration, and for such cases tracheotomy is unnecessary except as indicated previously. Care of a patient with bulbar paralysis demands much expert nursing care, but excessive attention is as inimical as too little; however, constant surveillance is desirable. A great deal of reassurance is often necessary. Surroundings should be quiet and invite rest and sleep.

The *spinobulbar* case needs as much or more care than the bulbar type of the disease; in addition, hot packs and physiotherapy are usually desirable. However, in bulbar and spinobulbar cases the need for saving life may demand temporary delay of these procedures. The *encephalitic*, *meningitic*, and *ataxic* cases are treated as the bulbar cases, particularly during the acute stage, and later the encephalitic and ataxic may need physiotherapy.

Use of the respirator is limited to patients who have total loss of function of intercostal muscles or partial involvement of intercostals and the diaphragm. If in doubt concerning the diaphragmatic involvement, fluoroscope the patient to determine the degree of involvement. Hot packs may relieve spasm of the intercostal muscles or of the accessory muscles of respiration, but if the paralysis is flaccid, they are of no value. The respirator is of no value where dyspnea or cyanosis are caused by secretions in the pharynx. Furthermore, the respirator is of no value for a bulbar case, for respiratory difficulty in bulbar patients is central, and they grow worse because the constriction of the rubber collar increases intracranial pressure. Bulbar patients have recovered following placement in the respirator, but they did so in spite of this handicap. The use of tracheotomy in such cases is also not warranted because the anoxia is the result of central respiratory or circulatory involvement and not caused by non-availability of oxygen (except where mucus obstructs the pharynx and trachea).

The *early convalescent stage* finds most of the cases with nonparalytic poliomyelitis excluded from the group as well as a number with bulbar paralysis and survivors of the encephalitic, meningitic and ataxic types. In

the *spinal* group the extent of weakness and paralysis is now quite definite, pain has disappeared and spasm is less marked. Hot packs are still applied where tightness persists to the extent that a near full range of motion can be accomplished either alone or with the help of the physiotherapist. At this stage muscle re-education is carried on and the patient treated daily, if possible. Where nerve cells to muscle fibers are not destroyed, restoration of function may occur, and the approximate time improvement or recovery is to take place is conjectural. Many cases will have shown mild involvement or those who at first appear to be severely affected have regained muscle function rather quickly. There are those, however, in whom the rate of return of function is not rapid, some will regain only partial function, while others, and they are happily few in number, will have but slight or no return in use of affected muscles. Only a small proportion of *bulbar* cases demand treatment in early convalescence, and these are by this time definitely out of danger. A few may still have difficulty in swallowing and even have to be tube fed for as long as three months, but ultimately and usually quickly they are able to swallow sufficiently well to warrant return to their homes. Some few patients will have residual weakness of one side of the pharynx or mild disability on both sides. The *spinobulbar* cases which have survived are generally able in early convalescence to receive hot packs and physiotherapy if necessary.

The *late convalescent stage* is reached by relatively few of the patients originally diagnosed poliomyelitis and sent to hospital. In the group are those with marked spinal involvement in whom return of function is slow and likely to be only partial. In this stage muscle atrophy begins to be evident and progresses if innervation is completely lost. In this stage a careful assessment must be made of each patient to map out a course for future action. In this the aid of the orthopedic surgeon is definitely needed to determine with the remainder of the staff or with the family physician the necessity for stabilization procedures which will make a poor or partially useful limb more useful by an operative procedure or bracing.

Adjunct methods of treatment have been advocated for the treatment of poliomyelitis. *Neurotripsy*,²⁸ or traumatizing of muscles with the hope of causing axon branching with penetration of muscle fibers, has been carried out, but Hines²⁹ finds no experi-

mental proof for axon branching. Substitutes have been offered for the relief of muscle spasm. Prostigmine³⁰ and neostigmine³¹ have been used with some success not as a substitute, where both have proved not quite satisfactory, but as an adjunct to hot packs. There is relaxation of muscle spasm, but like the effect of packs it is temporary, must be continued, and unfortunately there are parasympathetic side effects which are deterrents to their use. Atropine in conjunction with these drugs has lessened the untoward reactions. Curare has been used to lessen the spasm with reported success by some³² and failure by others.³³ The drug is not without its dangers, and the margin of safety is narrow.³⁴ The ideal treatment for relief of spasm has not yet been found and recent attempts to supplant the work necessitated by hot packs have not been successful.

SUMMARY

The epidemiology and treatment of poliomyelitis has been presented briefly and expression of contemporary thought on these two phases of the disease has been attempted.

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THE RELATIONSHIP OF THE PRIVATE PRACTITIONER TO THE HEALTH PROGRAM*

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The authors were encouraged to prepare this paper on the relationship of the private physician to the local health department because of their previous experience as full time local health officers in Oklahoma, and their recent two years private practice in Oklahoma. The practice, however, is in an area in which full time local health service is not provided, consequently, the needs for such service are more apparent.

It must be kept in mind that the observations and recommendations of the authors in this paper are related solely to local health service, and may not be translated into support of current policies and activities of the various national organizations engaged in public health activities. This paper has been prepared in sections, dealing with the phases of public health that a local health unit normally performs.

COMMUNICABLE DISEASE CONTROL

It is in this field that both doctors and laymen may rightfully expect their local health department to be most active. It is felt that the local health department should provide diagnostic service on suspected communicable cases in the way of laboratory facilities and consultation.

The health officer must conduct himself in a tactful manner, submitting pertinent laboratory data to the patient only through his physician, and in consultation to conduct himself in accordance with the highest principles of professional ethics.

Should there be disagreement in the diagnosis, the physician must recognize that it is the health officer who carries the responsibility for spread of communicable disease within the community, and must give his wholehearted support and cooperation to whatever isolation and quarantine measures the health officer recommends.

Needless to say, the active treatment of the case should be left to the private practitioner unless help is requested by the physician. It is believed that the health department should furnish such sera and biologicals as are requested by the physician for the treatment of communicable cases. Since responsibility for control measures lies with the health department and follow-up of contacts might involve patients of other doctors, these measures should be strictly in the field of the health department. A physician and health officer should collaborate on any immunizing procedures found necessary to prevent the spread of disease.

VENEREAL DISEASE CONTROL

As with other communicable disease, diagnostic aid and control is, and should be, a health department responsibility. Dark field examinations should be available as well as serology, smears, and cultures.

Control of venereal disease is possible only through early diagnosis, prompt and efficient investigation of all contacts, and their prompt treatment.

If penicillin in oil and wax or procaine penicillin in the treatment of both gonorrhea

*Presented before the Section on Medicine of the Oklahoma State Medical Association at the Annual Meeting, May 19, 1948.

and syphilis prove efficient, it would seem that possibly for the first time it would be possible to very definitely reduce the incidence of venereal disease in a geographical area. The expense of the penicillin in oil and wax is, of course, still too great for people on an indigent status and it would seem appropriate that penicillin in oil and wax or procaine penicillin should be supplied by the health department upon the request of a physician for the treatment of these people.

In order to prevent misuse of this expensive drug it does not seem to us unreasonable that the doctor should be required to present a certificate of indigency and give the drug according to a schedule outlined by the health department based on the latest expert opinion. A completed schedule of treatment should be submitted on a simplified card furnished by the health department. The physician should promptly report the failure of any patient to report for the treatment as outlined.

MATERNAL AND CHILD HEALTH PROGRAMS

The authors feel that in these programs the health department and the private physician should stay strictly within their own respective fields.

Preferably the private physician should handle all the pre and post natal care as well as the delivery but where economic or geographical considerations prohibit, the health department should provide pre and post-natal care by visiting nurses.

In isolated areas clinics could be set up for more economical use of the nurses' time. If the expectant mother reports first to the clinic she should be encouraged to make her choice of physicians early and should be required to make at least one visit to him before her expected date of confinement.

Needless to say, the reports of the nurses as to the results of her prenatal checkup, whether in the clinic or in the home, should be submitted to the attending physician without delay. To avoid confusion, physicians utilizing this service should agree on certain standing orders for routine cases.

The present shortage of nurses would seem to prohibit a home delivery assistance program. In indigent cases a short period of hospitalization at public expense could be authorized on a smaller budget than the provision of 24 hour home delivery nursing assistance.

INFANT AND PRE-SCHOOL PROGRAMS

The programs have for the most part been poorly handled, in the authors' experience. The reason may be that the health departments are able to obtain better statistical reports and do their work more easily by concentrating immunization and nutritional work in the school children.

Even a casual familiarity with morbidity statistics of communicable diseases would indicate the fallacy of this view. Mortality and morbidity rates for practically all communicable diseases are much higher in the pre-school group and nutritional deficiencies more readily adjusted.

For these reasons 'an active program for infants and pre-school children is, in our opinion, one of the most essential services of a good local health unit. Immunizations could be given in a well-baby clinic to patients who have been referred by the private physicians.

It is believed that immunizing agents should be furnished private physicians for administration to children regardless of their ability to pay, or else not be furnished at all. Such classification as to their ability to pay requires too much administrative expense as compared to the cost of the biologicals, and the psychic trauma to the child or parents being classified as indigent is often irreparable.

A home visiting service by nurses of the health department to the homes of infants and pre-school children is an invaluable service to the community and the private physician by early detection and prompt correction of remediable defects.

SCHOOL HEALTH PROGRAMS

The most frequent cause of minor friction between the local health department and private physician occurs over the question of immunizations of the school children.

Friction usually arises because of over-enthusiastic immunization programs by health departments in areas where private physicians are readily accessible, causing some private physicians to feel that such immunizations would have been done by him had the health department not given this service.

This attitude, while prevalent, has been repeatedly shown to be erroneous because of the fact that activities of this nature by the health department always stimulate similar activity in the offices of the physicians in the area. This, of course, is an effect which is desired for greater protection of the public health.

Community health benefits in the greatest degree by cooperation of the health department and physician in these protective services. Physicians, in the meeting of their societies, if kept informed of health department policies will be less likely to be critical.

It is agreed, however, that immunization programs by the health department should be the most intensive in rural areas where private physicians are not accessible. In urban areas a preliminary health education campaign would encourage many to go to private physicians. If the health department then later immunized those who had not responded to the education campaign there should be no cause for criticism.

Of course, such delays could not be countenanced in epidemic periods. We feel very strongly that there should be no classification of the children in the schools according to the indigence of their parents.

In general, school health examinations are more productive of voluminous health statistics and a misplaced feeling of public confidence that of any real contribution to the health of a child.

The number to be examined prevents a good examination and in most cases parents are not present to give a good history or discuss appropriate treatment. We feel that teachers will most often recognize signs of physical defects that require attention and additional rough screening technique might be readily taught to them.

Visual tests with a Snellen chart could readily be conducted by teachers. Hearing defects could be detected by mass audiometer testing. Skin and throat inspections would disclose most of the defects usually uncovered by more time consuming methods.

Cases requiring remedial care should be promptly referred to the private physician and the school nurse should do follow-up work and aid in the proper disposition of the case.

We should like to mention one other function of the health department—that is the field of community sanitation.

In this activity, the health department is well equipped by personnel, law and practice to do the job. We feel that in this activity, the health department should have the responsibility and full authority, working for improved sanitation and sanitation methods in its various phases, including milk and water supplies, restaurant practices and others.

The private physician can well afford to give his individual support and his active, community interest to this work, recognizing the service as an important contribution to the health of his community.

In conclusion, we feel that a properly planned program of preventive medicine will be beneficial to both the community and to the practicing physicians. A program of this type is best planned and supervised by an agency such as the state department of health, which is not closely associated with local politics, but which is still small enough that it is not subject to unwieldy organizational problems.

The health officer should be selected from outside the community so that he is not hampered by close personal and political associations in the area in which he works.

When the community is provided with full coverage in the fields of preventive and curative services by active cooperation on the part of the health officer and the private physician, each working in his respective field, there would seem to be less reason for demands on the part of citizens, or their elected representatives, for a systematized, state control of medicine.

We feel, from experience, that there is a definite need for both the health officer and the practicing physician, that together, they can serve the needs of their community, particularly in the fields of communicable disease control, venereal disease control, maternal and child health programs, infant and pre-school programs and in the field of school health work.

Certainly the health officer must employ tact and cooperation, remembering always that he is an auxiliary, so to speak, to the private practitioner, working to raise the general level of health in his community through the sensible application of preventive health measures.

And certainly the physician can recognize the health officer as an ally who can assist him in the control of communicable disease, in the field of education for better health practices, and as the agency which can supply service in the field of laboratory facilities and work.

Both the health officer and private physician have earned their right to practice their art—both should do so, together, for the good of all.

PUBLIC HEALTH IN OKLAHOMA*

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OKLAHOMA CITY, OKLAHOMA

It is impossible to limit this discussion to the boundaries of our state since public health in Oklahoma is a reflection of public health in Michigan, in Mississippi, in Bogota and in European countries.

Dr. William P. Shepard, one of the vice-presidents of the Metropolitan Life Insurance company once said: "The history of public health is one of the brightest chapters in the long history of man's upward struggle" — it starts with the discussion of miasmas as the cause of epidemics, goes through cautious references to the germ "theory" of disease, the first announcement of the discovery of the cause of yellow fever, and on through many other milestones of public health progress.

In the January issue of the American Journal of Public Health there was a series of articles under the title "Public Health in Midstream" — the introductory article traced public health in the United States for the past 75 years. In reading this forceful and timely article, we were reminded of some changes, some progress that has been made: Cholera and yellow fever are no longer encountered in this country — bacteria are known for what they do — no superstition or guesswork about it — typhoid fever and diphtheria are all but banished. Smallpox epidemics are the exception rather than the rule — the death rate from tuberculosis is about one-seventh the rate in the 1870's — childbirth is twice as safe and infant mortality has been reduced to one-third its former rate.

All states are in the registration area for vital statistics, and the biometrician has become our scorekeeper. The average life expectancy at birth has increased approximately 22 years, the average age of man now being 65 years plus.

This progress cannot be attributed to the efforts of public health alone but rather it has come about through the combined efforts of the clinician, the research worker and an enlightened public.

Public health in this three-quarters of a century has become a specialty. It is now a combination of medicine, dentistry, engineering, nursing, education, hospital inspection, bacteriology and chemistry. That we have become further professionalized under the ideology of public health is of great significance to our future. The persons who have had training in the field of preventive medicine should be recognized along with the private practitioner.

Public health in Oklahoma began before Oklahoma was a state and dates from an act of the first territorial legislature which met in November of 1890. Governor Steele signed the bill creating the Territorial Department of Health on December 25 and the law was effective immediately.

According to this law the Territorial superintendent of public instruction was ex-officio president of the Board of Health and the Governor appointed a physician who was a resident of the Territory as superintendent of health. The Board was given authority to "make and enforce any and all needful rules and regulations for prevention and cure of diseases and to prevent the spread of contagious, infectious or malarial diseases among persons or domestic animals." They could establish quarantine and make regulations for isolation.

The superintendent, together with two other physicians selected by the Board of Public Health, examined and licensed physicians.

In 1907, Oklahoma adopted a State Constitution and became a state. This Constitution makes provision for the creation of a Board of Health and the first Legislature vitalized this provision by "creating a State Board of Health in charge of one commissioner to be appointed by the Governor." This Commissioner was given responsibility and authority for making needful laws and regulations for "promoting better health in the state and prevention of communicable diseases among persons and domestic animals." Provision was also made for estab-

*Presented before the General Session of the Oklahoma State Medical Association at the Annual Meeting, May 19, 1948.

lishing a laboratory under direction of the State Commissioner of Health.

The responsibility for examining and licensing physicians, however, was given to a board of nine members appointed by the Governor.

J. C. Mahr, M.D. was the first State Commissioner of Health.

From time to time new duties have been given to the Department of Health — inspection and licensing of hotels, et cetera, control of all public water supply and sewage systems, the inspection of all food-handling places, grocery stores, bottling works, drinking fountains, restaurants, bakeries, slaughter houses, meat shops, et cetera.

Today 52 cities are operating under the U. S. Standard Milk Ordinance and 45 cities and one county (Comanche) have adopted the Standard Restaurant Ordinance.

In 1919, the Legislature, realizing that tuberculosis sanatoria are integral and necessary factors in the control of tuberculosis, appropriated funds for three TB sanatoria, and during the same session, authorized the creation of the Division of Tuberculosis Control in the Health Department. (The sanatorium at Boley has been abandoned).

At the present time, the Commissioner of Health is charged with selecting the superintendents and assistant superintendents and nurses of these sanatoria. The superintendents in turn employ all other personnel.

The law requiring treatment for eyes of the new-born was passed in 1921 and enforcement of this law, given to the State Department of Health.

In 1928, Oklahoma was added to the federal registration area and the vital statistics since then have been authentic and a matter of record. Using these statistics as a guide, we know what and where our greatest health needs are and we can plan a more constructive program to meet these needs.

Also, in 1928, a malaria control campaign was started in the southeastern counties. At present, 10 counties of high malarial incidence are participating in this program. The number of cases of malaria reported has decreased from 2,028 in 1942 to 308 in 1946. This reduction in the number of cases of malaria is due to two factors:

1. The construction and drainage program; a joint undertaking of the State Department of Health and various relief programs of the federal government — the building of hundreds of sanitary toilets and the draining of swampy areas; and

2. The spraying program which was begun in 1941 and followed later by the spraying of homes with D.D.T.

You might be interested to know that during the first three weeks of April this year, some 9500 houses were sprayed by the malaria control division of the State Department of Health.

In the past 10 years, great strides have been made in the field of Public Health in Oklahoma. Many new laws have been enacted, the most important of which is the 1945 law creating a State Board of Health.

It is interesting to note the changes in public health, both from a national and from a state point of view, during the past half century. Originally, public health was prevention of disease, primarily by sanitation and immunization.

The two phases of medicine, preventive and curative, are so closely allied that it is impossible to make a clear cut distinction. Although the private physician must necessarily face his particular task in a different way from that of the full-time health officer, the participation of the private physician in public health is indispensable. At the same time, the work of the health officer will, of necessity, enlarge the scope of work of the private practitioner. Private medicine deals with individuals — Public Health deals with groups and entire communities. Necessarily, the private physician is concerned with prevention, diagnosis and treatment of individual instances of disease, while the health officer is interested in an illness as a disease entity which might be a threat to the health of the entire community. The two approaches may be different but the goals are identical. The health officer can and does make the work of the private practitioner more effective, more inclusive and more useful socially. This is accomplished by stressing health education among the people, by his work in the community and his plan of referring those found to be in need of medical or dental care to the private physician before serious illness develops and by preventing epidemics through all known media available to him.

In some communicable diseases it is necessary for public health to reach into the treatment field along with the clinician in order to effect a control. However, the work is mainly detection and case-finding. A good example is in the detection and diagnosis of tuberculosis by doing mass x-rays — in working with the Oklahoma branch of the

American Cancer Society and participating in the cancer clinic at the University Hospital; and cooperating with the county medical associations in similar clinics in various counties in the State.

The latest method of treatment of venereal diseases, by use of antibiotics, requires certain facilities and medical and nursing care. Due to the fact that there are no adequate facilities for this type of treatment in other hospitals, either public or private, this treatment is centered in the Oklahoma Medical Center which operates as a part of the Public Health Department. There are some 50 diagnostic and detection clinics operating over the State.

Other new responsibilities delegated to the State Department of Health include:

1. The licensing of hospitals and related institutions. This authority extends principally to the physical plant. It does not enter the field of operations.

I should like to say that we have had almost 100 per cent cooperation from the hospitals. The owners and operators are most anxious to bring their institutions to the highest standard of perfection. The nursing homes are, with the exception of two or three, far below the minimum acceptable standards. There is need for much work and education with the people operating these institutions.

2. We are also charged with the responsibility for supervising hospital construction. It may seem a far cry from preventive medicine to the construction of buildings, but it is just another evidence that a sound health program does not begin with calling a doctor when illness strikes nor end when the patient recovers or dies, as the case may be. Nor, is the health program limited to giving medicines or performing a surgical operation. There is no phase of community life which does not affect and is not affected by the health of its constituent population.

3. Another duty which has recently been given to the Public Health Department is the program of general mental health. This program assumes that early detection and treatment will prevent many serious illnesses. This, like tuberculosis, is a case where treatment is prevention.

There are two new phases of health which, no doubt, in the near future, will become parts of our far-flung public health program: Heart disease, which stands first as a cause of death, and geriatrics. Medicine and science have added years to the span of life — it is now a responsibility to make

these added years, happy years; in the words of Dr. Edward L. Bortz, President of A.M.A., "to add life to years."

In addition to the medical organizations which contribute so much to the cause of the overall health endeavor, we want to recognize the many voluntary agencies for their part in the health program of the state. These groups and organizations can and do take the lead in educating the public to know the advantages of this or that program — they can and do conduct demonstration clinics — they serve as pilots showing the path along which a new program should move. They are the pioneers and it remains for the official agency to extend the program once the voluntary agency has demonstrated the value of the service and has reached its limitations.

In public health, people are served best at local level. The State Medical Association has listed as one of its immediate objectives the extension of public health service to the general public. As recently as 1942, the American Medical Association expressed its concern for the need for local health services and resolved to use all appropriate resources and influences of the association to the end that at the earliest possible date, complete coverage of the nation's area and population by locality, county, district, and/or region, full-time modern health services will be achieved.

It is a matter of record that no state has been able to make sufficient state funds available for giving adequate health coverage. By conservative estimate this service would cost from \$1 to \$1.50 per capita — the Oklahoma state appropriation for health for the fiscal year ending June 30, 1948, amounted to some \$32 per capita, which represents an increase equal to three and one-half times the appropriation of eight years ago. The other funds come from local sources, county, city, schools and from Federal government, with the bulk from the last named source.

The Federal government is recognizing its share of responsibility for public health, and, at the same time is recognizing the right of the states to administer these programs within their own jurisdiction.

The relationship of U.S.P.H.S. to state health department is primarily one of financial aid, not of responsibility for performance of service. To a greater or lesser extent the state follows this plan in working with

the counties. Albeit, there are some phases of work which can be administered more effectively and more efficiently from the central office than from county departments.

A local health department is established when the people ask for it and by joint planning of the State Department of Health and the local authorities.

I should like to quote from a recent speech of Dr. V. A. Getting, Commissioner of Health of the State of Massachusetts:

"There is no real reasonable explanation why people living in rural areas cannot have the same benefits of preventive medicine and other public health procedures as those who live in urban areas. Today we possess knowledge for the promotion of good health which can be made available to all of the people. The child living in the community serviced by an adequate health department, enjoys certain advantages which enable him to develop better health, avoid certain communicable diseases and enjoy a longer, healthier, and what is more important, more productive life. In a like manner, mothers and other adults lack these benefits of basic health services unless they reside where these become available through adequately staffed local departments of health. The objective is to see that every child and every adult living in any part of this nation is afforded the same opportunity for healthy, happy living with the greatest possible life expectancy. It is only fitting and proper that the Federal government should assist in providing for the health of the people since the people's health is the nation's greatest asset. But the primary responsibility for attaining good health should and does rest on the shoulders of the State and its people."

Local health departments should keep the facts of births, deaths and sickness and make these facts available for planning local programs — they should carry out all necessary activities to control communicable and preventable diseases — they should supervise the physical surroundings of the community — the sanitation — and do those things which are necessary to improve individual health, thereby making a community a healthful place in which to live. They should carry on Public Health education, making known the facts which, when translated into action, will promote better health for the people of that community. They should coordinate the health activities of all groups in the community so that the objective of better health for all of the people might become a reality.

I should like to say also, that a public health program is a sound financial investment. Data collected over a period of years indicate improvement in death rates for specific causes of death, particularly those due to infectious disease, over the past 45 years in a remarkable way in those areas where health services have been made available. Since 1928, when Oklahoma became a part of the registration area for vital statistics, some noticeable improvements are shown. We have a definite report from one county in our state which tells a good story and adds force to our statement that, if human life can be valued in dollars and cents, a local public health department is a sound investment. These statistics make a comparison between the four years previous to the establishment of a health department in the county and in the year 1946:

	1936-1940	1946
	<i>Per 1000 live births</i>	
Neonatal deaths	32.4	12.9
Infant deaths	58.1	24.9
Puerperal deaths	5.9	2.6
	<i>Per 100,000 population</i>	
Deaths from:		
Typhoid fever	1.3	0.0
Scarlet fever	0.8	0.0
Whooping cough	5.0	4.2
Diphtheria	5.0	0.0
Tuberculosis	40.3	12.7
Measles	0.0	0.0
Influenza	18.5	2.1
Pneumonia	66.8	25.5
Diarrhea and Enteritis	6.7	0.0

In one community in this county splendid results were obtained by team work and cooperation among the schools, the local doctors and nurses, the P-TA and other organizations and the local health department. In the P-TA Summer Round-up 281 children in the elementary schools were examined. Of this group 59 were referred to private physicians for corrective treatment and 32 reported. From the same group, 42 were referred for dental defects and 32 reported. Such results can be attained only by team work in the community.

This is typical of all counties where we have local health departments.

May I suggest further that medical care, preventive, diagnostic and curative services in the future will be determined, not by financial status or place of residence of an individual, but by the needs of the individual. Our democracy will not continue to

allow its people to die, or, for that matter, to be only half alive, solely because they are unable to pay for what modern medicine will give them or because they live in isolated places. Health, like education, is not only an individual asset, it is a national asset as well. The job of providing such a coverage of medical care is and must be a joint undertaking of the State and Federal government.

Recently the governing board of our State Medical Association went on record for the extension of health services to the public by promotion of voluntary prepaid hospital plans and by working with the Board of Health in establishing full-time county and district departments.

Quoting from Dr. C. E. Northcutt, President of the Oklahoma State Medical Association, — "We in the United States have the highest standard of medicine in the world — and the highest standard of Public Health — we must preserve this through our democratic system — we must educate the profession, not only to see the science of their profession but the art. . . . For too long we have buried ourselves in science. Now we must take the initiative for better Public Health."

Oklahoma is making progress along the line of health coverage for the entire state through the Blue Cross Hospital Plan, the Crippled Children's Commission, the Tuberculosis Control program and the local health departments covering 37 counties and 74 per cent of the population. There are, however, 26 states which have greater per cent of coverage than Oklahoma.

As yet there is no satisfactory program of medical care of the indigent nor for the care of the aged and chronically ill. Oklahoma ranks higher than bordering states in number of Public Health physicians available to meet the standard of one Public Health doctor for each 50,000 population. Oklahoma has 24 counties and one city in this category.

In conclusion may I say that the attempt to fix boundaries of Public Health by establishing a rigid distinction between prevention and cure is no longer realistic. Medicine and Public Health alike are reaching the stature of a social science in the service of society and as an integral part of the social progress. More effectively than any other approach, Medicine and Public Health can build a conception of common human need.

The activities of the World Health Organization of the United Nations furnish a per-

tinient illustration, for health is something that all men desire and there is no limited supply for which nations must compete. Cancer and scarlet fever have no political ideology. The principles of sanitary engineering do not bear a Russian or an American label. No difference exists between tuberculosis in the French Republic and tuberculosis in the United States. Infantile paralysis is the same thing in London and in Washington, and human sorrow is no less poignant in one city than in another. The world of disease and misery is not divided; it is a common world. In terms of human suffering, the world is truly and tragically, one world.

We are members of one human family, fighting the same enemies of disease and suffering — in Russia or Brazil — in the Scandinavian countries or in the U. S. A. Only by united efforts can we survive and the field of Public Health in Oklahoma or in the world can be a practical demonstration of a new kind of team work. It can be a bridge across the gulf that separates this frightened present from a saner and better balanced future.

We are overwhelmed by the rapid tempo of the changing times. For us to attempt to live in the horse and buggy age in medicine and Public Health is comparable to the change in the world at large. A few years ago — in 1938 — Tahlequah celebrated the 100th anniversary of the establishment of the Post Office by sending mail by stage from Tahlequah to Muskogee (30 miles) and from Muskogee to San Francisco (some 2200 miles) by air. The difference in time of the two schedules was less than one hour. This pointed out vividly to me the changes from the age of the covered wagon and pony express to the age of the airplane — and the end is not yet! We have evidences of even more rapid transportation methods which mean that we will speed up our daily tempo to keep pace with these changes. The evidence of change in the medical and scientific world is similar to the change in the world of industry.

The development in causes, effects and cures for diseases such as cancer, leukemia, mental illness, and many other diseases are not made by newspaper publicity and ballyhoo, nor by rabble-rousing, but by the men and women in our laboratories who labor for hours and weeks, even years, to establish a fact. These men and women are the pioneers, the real heroes in the world of medical discovery. It remains for the physicians, both

the private physician and the public health officer, to make use of proven discoveries in their daily practice.

We have biometricians and they give to us an index of our health problems and needs. We, as trained men and women, should familiarize ourselves with these indices and work together to give Oklahoma a program of public and private health which will be second to none in the entire world.

As I said in the beginning — Public Health in Oklahoma cannot be limited to the boundaries of the state. In a few hours a

case of plague can be brought from the shores of China to our own state. We must be alert to present conditions and we must anticipate the future and prepare to meet the conditions which the future may bring. We cannot live in the past — we must keep pace with the world.

The need for medical care of the whole population is urgent — we know that it is not all that it should be — but any plan for an overall medical care program must include preventive medicine and the services must of necessity originate and function at a local level.

INTERNAL MEDICINE AND THE FAMILY PHYSICIAN*

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BROOKLINE, MASS.

The family physician of today in many parts of the country practices internal medicine, often with the addition of pediatrics, which after all is only internal medicine in little people, i.e. children. In some parts of the country, usually in small towns and country districts, the family physician adds obstetrics to his practice and does minor surgery, but this seems to be becoming less frequent. Medicine has been undergoing now for a long time a pigeon-holing process by which has come about more and more splitting up into what we term specialties, leaving fewer and fewer with broad scholarly knowledge of medicine. This has brought about a curious pedagogic situation by which apparently almost the only one now supposed to know medicine as a whole is the medical student, who, however, is being taught this by individuals, particularly those of professorial rank, almost no one of whom knows all of medicine as he, the medical student, is expected to know it. Probably the family physician comes next to the medical student in needed breadth and extent of medical knowledge. This would be correct also of internal medicine as a so-called specialty, were it not true that a very large proportion of those designated as specializing in internal medicine further narrow their field of interest and work by concentrating within the specialty of internal medicine on some sub-

division of it as cardiology, gastroenterology, endocrinology, neurology, etc. As it is, in general he, who specializes in internal medicine, now has a narrower field than has the family physician, even than he who sees no children and does neither obstetrics nor minor surgery. This, however, should not be so. Internal medicine as a specialty should entail knowledge of, with ability to recognize and treat, all of what is contained, let us say, in a textbook of medicine including neurology and psychoneurology. To make it less of course renders its attainment easier. To enter a narrow specialty requires less of the individual than to devote himself to internal medicine, as already described, or to become a family physician. I often wonder whether this has not been an important urge to many physicians of today in their selection of the form of medicine which they have chosen and which so often is one of these narrow subdivisions of a broader specialty. This trend, it has seemed to me, has resulted in there being fewer men now with what I have called broad scholarship in medicine.

Your Editor has asked me to prepare an article for the Journal "outlining the opportunities, responsibilities and perhaps suggesting something of the personal characteristics and personal aptitudes which fit best into the practice of internal medicine." Let me begin by saying that at present it seems to me that one of the greatest needs in medicine is for family physicians with the train-

*Reprinted through the courtesy of Phi Rho Sigma Fraternity from April, 1948, issue of the fraternity publication.

ing of the specialist in internal medicine. The training needed for this is well outlined in the requirements to make him eligible for certification in internal medicine. The family physician of the future should have no less than this preparation. I would urge all planning to become family physicians or specialists in internal medicine to fulfil the requirements of, and become certified by, the Board of Internal Medicine; this should be done in the years immediately following completion of hospital internship, since later on it becomes much more difficult of attainment. The requirements of this Board can be obtained from the Secretary of the Board. The student before graduation from the medical school should familiarize himself with them and be guided by them in planning his training.

I know of no way better to learn of the opportunities and responsibilities of internal medicine than by observing closely those with whom you can make contacts who are licentiates of the Board of Internal Medicine including family physicians; what they are doing, what posts of responsibility they hold, how they are regarded by colleagues, patients and fellow citizens, these things will tell you what manner of men in medicine they are, what their opportunities and responsibilities have been and are and what you should set as your goal.

The goal of certification in internal medicine having been passed with its preparatory activities, which in all probability have included — they should have — the investigation of some small problem, what next? Study patients; read medical literature; attend medical meetings and contribute papers to them; have something to investigate; develop personal relations with patients and their friends; participate in community activities; cultivate a hobby; in the language of Osler, make Work your master word and do these things until, for one reason or another comes retirement; then keep on doing some of them. This is the ideal for you in internal medicine and equally as family physician. No man can expect to excel in internal medicine, unless continuously he studies patients with all sorts of diseases and reads the work of others. Read widely; when possible, browse in the medical library; own medical books and subscribe to journals, general and special; the books and journals, which you do not own, rarely will be read; establish the habit of daily selective reading of things medical; it is surprising

how one hour of daily reading can keep a man abreast of new knowledge in medicine. Do not be tempted to curtail and narrow your field of reading by the oft made statement that so much is published now that it is impossible to keep track of it. This is but the excuse of the lazy, and it is not a correct statement as I personally can vouch for. The more that is published, the more there is that is worth reading. It is entirely possible to know by reading much of the whole field of internal medicine and have some time, too, for general literature as has been my own experience.

As to needed personal characteristics and personal aptitudes what may be said? Great success will not come in medicine unless the physician likes people and is interested to study their personalities and reactions. The practice of medicine is far broader than diagnosing and treating a disease; it is a study of man in his reactions, mental, moral and physical, to disease. The physician should become the wise counselor and guide of his patients; to develop these relationships is an integral part of the practice of medicine. It is my belief that every physician needs a religion, based on a simple faith, with which to guide his patients to healing or to ease their slipping into oblivion; the atheist, the man with no religion, in my judgement should not become a physician. Of course the physician must be honest with himself and his patients avoiding all shams and poses. If children and dogs do not come readily to you, question seriously whether you have the proper aptitude for medicine. Do not be garrulous, eschew gossip, do not talk to others of patients and their confidences to you, follow Osler's wise advice, of your colleagues, if you do not have good things to say, say nothing; it is well to apply this also to your neighbors and other fellow citizens.

As good medicine can be practiced in the home as in the hospital; only some disease conditions require methods only applicable in a hospital. A well appointed office is necessary to good medicine; the more special examinations and studies that can be made in your office, the better, in all probability, will be the interpretation, correlation, understanding and application of them in relation to each patient. He, who sees patients only in the hospital, has the handicap of a void in knowledge of the patient as to how he lives, what are his human relationships to family and friends and what is his real economic situation, all very difficult to supply

in any way than by personal contact and observation outside the hospital. The same applies to the physician, who only in the office comes in contact with his patient. Best medical advice in general will be given by the man who knows his patient's home, his family, his friends and his business. The family physician in these respects has a great advantage over others in internal medicine and more than any other can establish those personal physician to patient relationships, so pleasant in the practice of medicine and so essential to success in it.

Much is being talked of about changing conditions in medicine, of socialized medicine, of governmental supervision and support. Always I have advised young men to go ahead with their thorough training for medicine without being disturbed by all of this. It is my judgement that always will there be a need in medicine for capable, well trained men, and such always will be well

compensated and able to live a good life, happy in a fine career. In my experience the medical men, who complain of the inadequacy of economic returns and are disturbed by changes, are the ones not well trained, because early in their careers they stopped learning and began forgetting so that year by year steadily they knew less and less of medicine. Unfortunately, there still are all too many of these in medicine.

I believe that along the lines drawn in the preceeding paragraphs success in medicine will come to those who diligently follow them. In all human activities success comes in greatest measure as the result of aptitude, training and continued diligence. This certainly is true of medicine. After full fifty years in medicine I can say to you young men, it is a fine profession, highly rewarding to him who follows it, filled with interest and great joy in its pursuit.

VETERANS MEDICAL CARE PLAN*

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OKLAHOMA CITY, OKLAHOMA

About one year ago, the Veterans Administration requested the Oklahoma State Medical Association to adopt the Veterans Home Town Medical Care Program. This society voted to adopt the plan and early last fall, the contract of agreement was signed with the Veterans Administration.

Every member of the Association received during the last few months, literature from the office of the Executive Secretary including the instruction manual to fee basis doctors, the fee schedule for medical services, a questionnaire as to whether you desire to do general work or specialized work, and if the latter, you received another questionnaire as to your qualifications and experience to do such work. You also received a list of questions and answers, which we think is very important as we have tried to visualize any question that might come to your minds, and then found the answers.

We have purposely gone slowly with the final disposition of this plan as we wanted to be sure we had the full cooperation of the local and regional offices of the Veterans Administration. We have had many meet-

ings with the advisory committee and with the Veterans Administration office and we now believe we have a clear understanding. More than 800 of you have returned your cards. We have indexed the doctors both by counties and specialties. Those of you who have neglected to send in your card but who still desire to participate, please get in touch with Dick Graham's office, our Executive Secretary, either in person or by mail and the necessary application will be sent to you.

Remember this plan is primarily for the benefit of the veteran, that he may choose his own physician when possible, in his own community. Also remember that this medical service is for service connected disabilities only.

Many of you have been serving as fee basis doctors for the past two or more years. You have received notice that you will have to be reappointed under the new plan.

Oklahoma is one of the last states in the Union to participate in the Veterans Home Town Medical Care Program. Therefore we would like your full cooperation and would like a 100 per cent membership.

I wish to go over a few of the most im-

*Presented at the Annual Meeting of the Oklahoma State Medical Association, May 18, 1948.

portant questions and their answers:

What is the plan?

Answer: An effort upon the part of the Veterans Administration to utilize the private physician to give the best medical care possible to the eligible veteran in his home town at a minimum cost of the taxpayers' dollar.

Who is eligible for this care?

Any veteran with a service-connected disability. Veterans in training under Public Law 16 may receive necessary treatment to prevent interruption of training. Female veterans may be hospitalized for certain non-service-connected conditions. The plan does not cover dependents of veterans such as wives, sons, daughters, etc.

Who will give medical care under this program?

Only doctors of medicine who are members of the O.S.M.A. Colored physicians, etc., will be considered by the Veterans Administration separately.

Will specialty work be done by only members of the Boards and Colleges?

No. However, those physicians desiring to do only specialty work have been asked to fill out a separate information sheet to show their proficiency in the specialty they elect. This questionnaire was mailed to all physicians who indicate that they desire to do specialty work.

How does the plan work?

Members of the O.S.M.A. will apply through the office of the O.S.M.A. for appointment as fee basis physicians. Upon appointment, the Veterans Administration will use these physicians in doing examinations and treatment on a fee basis.

Must all examinations and treatment requests by veterans have prior authorization of the Veterans Administration?

Yes. In rare hospitalization emergencies, if prior authorization cannot be secured, a report of the case must be submitted to the Chief Medical Officer of the appropriate regional office within 48 hours. In rare emergency cases where treatment is necessary, if prior authorization cannot be secured, a report of the case must be submitted to the Chief Medical Officer within 10 days.

Who determines the eligibility of a veteran for out-patient treatment?

The Chief Medical Officer or his designate of the Veterans Administration Regional Office concerned.

How do I receive authorization to do either examinations or treatment?

In most instances the V.A. will have pre-

viously authorized the veteran for an examination or treatment. In emergencies or when the physician is contacted initially by the veteran it is absolutely necessary to secure authorization. In emergencies you should call collect the Chief Medical Officer in the regional office covering the county in which the veteran resides and provisional authority may be granted.

How and whom do I contact for authorization for examination and treatment?

The Chief Medical Officer in either the Muskogee or Oklahoma City Regional Office, depending upon the area in which your county is located. Preferably by form 10-2690 or by letter but in emergencies by collect wire or telephone.

What should requests for authorization for treatment state?

Number and type of visits, (office, home, day-home, night-home, etc.) deemed necessary by calendar month. Also a report of any special services required such as diathermy, X-Ray, injections, laboratory, etc., by calendar month, and by all means, your diagnosis.

How are appointments for examinations and treatment made?

For examinations the V.A. will notify the doctor and the patient simultaneously and they will mutually agree upon a time and date. For treatment the same procedure will be followed. Please bear in mind that it is assumed that the physician will give him the same priority as any other patient. He is not to be considered a charity case.

How do I receive patients?

For examinations the V.A. will select the physician on a rotation basis. For treatment the veteran will select his own physician if the physician is qualified in the field of work the veteran needs. In instances where the veteran does not have a physician of his own choice the V.A. will use local physicians on a rotation basis.

What is the difference between examination and treatment?

Examinations are for the purpose of determining whether or not the veteran is in need of treatment or in connection with compensation claims. Treatment is the medical work necessary to be done for a veteran after the V.A. has established it is a service-connected disability. Both procedures to have been authorized by the V.A.

What is the difference between general and specialized work?

General work follows the usual accepted term. Special examination or treatment will be decided by the V.A. and only physicians

who are approved in their specialty will be used to give specialty examinations and treatment.

Can I do both special and general examinations and treatment?

No. You must decide which type of work you desire also whether or not you will meet the minimum requirements for a specialist rating.

What will I be paid for the examinations I do or the medical care I render?

On the basis of the fee schedule and for items not covered in the fee schedule by agreement with proper officials of the V.A. through the office of the Chief Medical Officer of the regional office.

Is there a maximum amount in fees I can receive during any period of time?

Yes. A limit of \$6,000.00 per annum has been established, this to include any retirement pay or fee received for services rendered as an attending or consultant physician at a veterans hospital. In certain instances this provision may be waived by the V.A., Washington, D.C.

How long will it take for me to receive my remuneration?

Not to exceed 30 days if the examination or treatment given by you is in order and the bill for your services rendered in conformity with V.A. procedures.

Do I state the amount of disability to which I believe the veteran is entitled?

No. You state only your findings. The adjudication division of the V.A. will arrive at the amount of disability involved on the basis of your findings.

What about prescriptions and hospital care?

Prescriptions will be handled by pharmacists who have been approved by the V.A. under a plan similar to this one. Your co-

operation in this phase is paramount in order that the pharmacist can be paid.

Hospitalization in private hospitals will be handled as outlined in Section III of the manual, "Instruction to Fee Basis Doctors".

Can a private physician prescribe his own drugs and be paid for same by the V.A.?

The answer to the above question holds unless there is no participating pharmacist in the community in which you reside. In this case, the V.A. will authorize payment of prescriptions upon receipt of request from the physician.

What regional office serves my county?

Oklahoma City regional office serves the following counties and all of the balance of the state West: Kay, Noble, Payne, Lincoln, Seminole, Pontotoc, Johnston and Marshall. The Muskogee office serves all counties east.

Should the veteran live in an area outside my community what regional office will I contact?

The nearest V.A. regional office giving veteran's name, C number, and location of his records.

How much red tape is there to the plan?

It has been cut to a minimum and if the instructions are followed there should be no more trouble than the handling of the average insurance examination.

Will I be authorized to take certain x-rays and do my own fluoroscopic examinations?

A "hand-carried" report by a messenger to the office of the physician and returned, will be utilized in such cases where the doctor only wishes to see an x-ray or the report. This is true in laboratory reports as well as x-ray, or may be authorized by telephone for the physician to take his own x-rays such as G.I. series or fluoroscopy or emergency laboratory examination when there is treatment for a condition that requires the actual taking of an x-ray or doing laboratory work.

DO YOU KNOW?

That—when Violet Sturgeon, M.D., Hennessey, was elected to the office of vice-president of the Oklahoma State Medical Association it was the first time in the 55 year history of the O.S.M.A. that a woman has been named as one of the officers of the Association?

A graduate of the University of Oklahoma Medical School in 1933, she also attended Oklahoma Baptist University at Shawnee. She served her internship at Children's Hospital, San Francisco, and has been practicing in her home town of Hennessey since 1935.

A REPORT ON THE PRE-PAYMENT PLANS FOR MEDICAL AND HOSPITAL CARE*

CLEVELAND RODGERS

TULSA, OKLAHOMA

Before I go into the details of this report on the progress being made by the plans for the pre-payment of medical and hospital care, both in our state and in the nation, I should like to review briefly the philosophy behind these plans for in reality, both are social movements. These non-profit plans, sponsored by both the local medical and hospital associations, with the approval of the American Medical and Hospital Associations, are known as the Blue Cross Plans and the Blue Shield Plans.

It has been during the past 15 years that an increasing interest has been shown in this country for new methods to enable people to obtain medical and hospital care. These new methods are the results of social needs. During the depression, and even today, an unexpected medical and doctor bill was and is a serious financial problem to the average American family. Frequently it becomes a catastrophe.

A century ago, even a half century ago, in this country a farmer, or a person living in some small community represented the average citizen. He provided against the cost of disabling illness by the simple method of saving money. With his savings he could pay for the limited medical treatment available—and it was limited!

So many of the circumstances of living have changed that it has been necessary to abandon the 19th century belief that, "Folks ought to take care of such things for themselves. They ought to save for a rainy day." Too many people could testify that their individual disability was so severe, or that it occurred so early in their earning period, that no amount of frugality could have provided the necessary funds.

The American people have had no difficulty in providing for themselves housing, clothing, and food, the things that are usually referred to as the necessities of life. Many of these so-called necessities are obtained by a system of budgeting, that is, paying so much a month out of their fixed monthly income. In this manner, these problems are not noticed. It, therefore, became obvious to the nation's hospital and medical economists

that the basic principle of any solution to the health problem would revolve around budget principles.

Working with the county and state medical associations, the hospitals were the first to launch a non-profit, voluntary, pre-payment hospital care plan. It became a matter of necessity to the hospitals in order to keep their doors from closing. At that time, sixty-five per cent of the hospitals for treatment of acute illnesses were non-profit, governmental organizations. These organizations relied on their patients for more than three-fourths of their income. The decline in pay patients, the increase in charity patients, and the decrease in donations and income from endowment during this period forced approximately 100 hospitals to close their doors each year because of financial stringencies. Hospitals found that their business was laid on their doorstep, irrespective of whether the patients could pay for the ultimate care they received or not. Upon such a basis, neither income nor outgo could be intelligently planned. Therefore, they organized the Blue Cross Plan to allow the people to include hospital care in their budget.

A few years later, in the middle or late 30's, groups of doctors employed the same idea in removing the difficult financial problem of medical care. It is comparatively easy to tell when a person needs hospitalization; it is not too difficult to determine how long he needs to stay at the hospital. Furthermore, it is easy to ascertain the expenses of the hospital and to say in advance just how much should be paid to the person as justifiable reimbursement for this hospital bill. But to forecast to any reliability just how many times a person will need medical care is a much more difficult matter. However, several non-profit voluntary medical care plans were established in various sections of the country during this period, and their workability has been proven.

By 1938, there were 38 hospital plans with 1,300,000 members; and three prepaid medical care plans with 700,000 members. By that time, hope was renewed by the people of this country that the national health care problem could be solved by voluntary means

*Presented at the Annual Meeting of the Oklahoma State Medical Association, May 17, 1948.

with the cooperation of the medical profession, hospital profession, and the people of the nation.

The prepaid hospital care Blue Cross Plan was established in Oklahoma in 1940 under the sponsorship of both the State Hospital Association, and the State Medical Association. The Blue Shield prepaid medical care plan, known as the Oklahoma Physicians Service, was established in 1945.

All Blue Cross and Blue Shield plans are alike in basic principles, that is, they are non-profit corporations, with the boards of trustees serving without pay. The members of the boards of trustees are usually representatives of the various interested groups of the community. Certain basic principles are adhered to as established by the American Medical Association and the American Hospital Association. However, the various plans vary as to details; that is, the dues and benefits from one area to another may vary somewhat in order to fit the local situation.

All of the plans employ the group principle which has been used by insurance companies for many years; this is commonly referred to as, "the spread of risk." In other words, a group of people agreed to pay small monthly amounts into a common fund. When an illness strikes any one of them, payment is made out of the fund to cover the illness in question. In this manner it becomes a small amount for each member of the group, but it takes care of a large hospital or doctor bill for the individual who has the misfortune of being sick. Therefore, it naturally follows that members must be obtained through this group principle, and this is done in various ways; first, in having employes enroll through their place of employment. Second, enroll associated groups, such as nurses associations, bar associations, members of farm organizations, etc. The third method, which makes the plan available to all of the people is to enroll the entire population of a town or county by requiring that a certain percentage enroll in order to make the plan work financially. These methods are now accepted as common practice with most of the plans throughout the country.

In Oklahoma, the Blue Cross hospital care plan and the Blue Shield medical care plan are separate corporations, and are both governed by separate boards of trustees; however, in the interest of economy, both plans are administered by one organization with offices in Tulsa and Oklahoma City. The finances and records of the two organizations are kept separate.

While the Oklahoma Blue Cross Plan was being organized, a Medical Association Committee was studying the various non-profit medical care plans that had been inaugurated in the various parts of the country with the hope of organizing such a plan for Oklahoma. In 1943, the committee was instructed to draft a prepaid physicians service plan in accordance with their recommendations to submit to the Medical Association for approval.

In April, 1945, the House of Delegates of the Oklahoma State Medical Association approved the committee's plan for surgical and obstetrical care. Like the Blue Cross Plan, it was organized under the Mutual Casualty Act of the state law as a mutual corporation, and was to be known as the Oklahoma Physicians Service. Funds for starting the plan were raised by interested physicians. The program was able to pay off these loans with interest within its first year of operation.

At the time of its organization, it was agreed that the plan would not operate in counties of the state where the plan was not given full approval by the County Medical Society. All but 14 counties of the state have approved the plan.

A board of trustees composed of nine doctors and six businessmen are appointed as a policy making board for the organization. These members are selected by a council of the State Medical Association and serve for three years. No trustees receive compensation.

On June 1, 1945, the first group was enrolled in the Physicians Service Plan and their contract became effective on that date. To be eligible for enrollment, groups must first be members of the Blue Cross Plan, which will enroll any employed group of five or more. Representatives of small towns or counties are eligible for membership in both plans if 50 per cent of the inhabitants subscribe to both plans.

In Oklahoma there are 10 employed representatives to enroll members for the two plans. Three of these are assigned to the Tulsa area, three to the Oklahoma City area, one to Muskogee area, one to the Ada area, one to the Enid area, and one to the Hobart area.

These representatives are paid a straight salary, and are not on a commission basis.

The three types of membership the Physicians Service Plan offers are:

1. A single employee membership which costs 75 cents per month.

2. A two-person membership which costs \$1.50 per month, and covers the employee and spouse (or child).

3. A family-type membership for the employee and husband or wife, and all unmarried children under 21 years of age at a cost of \$2.00 per month.

Members are given the right to select their own physician, regardless of where he may reside. In the membership agreement, a physician is one described as holding a license or certificate issued by the State Board of Medical Examiners.

The benefits offered to members and amounts to be paid for such benefits are decided by the trustees. The benefits include surgical and obstetrical care. A 10 month waiting period is required after effective date of membership on obstetrical cases. It is not the intent of Blue Shield to limit the amount a physician may charge for services by listing prices paid by the plan for the various services, but rather, it is an indemnity plan to help defray medical service costs.

When a member desires to use the offered services, he merely submits his membership agreement to the physician. Forms are furnished every doctor in the state, and secretaries of the County Medical Societies for submitting claims for payment. The physician completes the form, listing the case history and the services performed. Members are required to sign a statement acknowledging receipt of the services. As most members desire that payments be made to the physician rather than to themselves, a statement authorizing the plan to make such payments is on the form for the member to sign if he so desires. This authorization is required by state law.

So during the past 15 years, the popularity of the Blue Cross and the Blue Shield plans has been shown by their tremendous and

rapid growth and enrollment. Today there are 91 Blue Cross hospital care plans in the United States, Canada, and Porto Rico, with a total enrollment of over 30 million people. One out of every five persons in the United States now participates in the Blue Cross Plan. In the eight years since the Blue Cross Plan was established in Oklahoma, 248,841 persons have been enrolled. During the month of April, a record enrollment was achieved with an enrollment of 14,000 persons during the month.

The Blue Shield medical care plans, which are several years younger than the Blue Cross Plans, total 64 plans in the United States and Canada. They boast a membership of over seven million members. In Oklahoma, the Blue Shield Plan is only three years old, and has a membership of 94,742 persons. During the month of April, a record enrollment of 11,000 was also achieved.

The success of these voluntary non-profit plans could have been achieved only by the splendid cooperation of the physicians and hospitals of our state. Their growth depends on the continued cooperation of these physicians and the hospital people. From a public relations standpoint, for the medical profession in Oklahoma, I can think of no more effective feature than publicizing your Blue Shield Plan established for the protection of the people of our state. The people have not only looked to you for medical care, but they are now looking to you for medical care within their means.

The success of these physician-sponsored, Blue Shield medical care plan and the Blue Cross hospital care plan on a voluntary basis has proved that the doctors and the hospitals have met the national health care problem in a democratic way — by giving the people more security — without loss of liberty.

HOUSE OF DELEGATES

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CLINICAL PATHOLOGIC CONFERENCE

The University of Oklahoma School of Medicine

Presented by the Departments of Pathology and Medicine

HOWARD C. HOPPS, M.D. AND R. Q. GOODWIN, M.D.

OKLAHOMA CITY, OKLAHOMA

DR. HOPPS: The patient that we are discussing this morning died as he was approaching the prime of life. The disease from which he suffered presents a dual problem; that of understanding the essential nature and pathogenesis and that of elaborating an effective therapy. We are fortunate in having with us Dr. Goodwin, Chairman of the Department of Medicine, to discuss and analyze the clinical aspects of this case.

PROTOCOL

Patient: R. C. M. 17 white male.

Chief Complaint: Vomiting. Swelling of face, feet, and abdomen.

Present Illness: In 1945 the patient was treated for an episode of generalized edema, nausea, vomiting, oliguria, and hematuria, of about three months duration. He had no recurrence until about September 20, 1947, when there developed periorbital facial edema followed shortly by abdominal distention. There was slight to moderate oliguria, but no dysuria and the urine remained clear and of the usual color. About September 27, 1947, he had transitory pedal edema, which recurred about three days later and was accompanied by orthopnea and dyspnea. For about a week before admission there had been intermittent nausea with vomiting and a slight cough, gradually increasing in severity. There was slight hemoptysis for three days before admission. He was treated with diuretics by his local physician, apparently without effect.

Past History: Diphtheria at the age of five years; pneumonia in infancy, and again during the fifth year of life; intermittent attacks of tonsillitis until tonsillectomy at about the age of nine. At this time and again at the age of 15, he was told by a physician that he had a "bad heart." There is no history of swollen joints. In 1946 he had an operation for intussusception, with uneventful recovery.

Family History: Mother, age 42, father, age 52, and five siblings all alive and well. The maternal grandmother died of a "stroke." The paternal grandfather died of "heart trouble." A paternal uncle died of "kidney trouble." A maternal great aunt died of "dropsy." Another maternal great aunt had "gall stones."

Physical Examination: Revealed a small, fairly well nourished, alert, cooperative, white male youth, who appeared acutely ill. Temperature was 98° F., the pulse rate 94 and regular, respiratory rate 56, and blood pressure 160/110. He was orthopneic and coughing up blood tinged mucus. There was periorbital and facial edema, and marked pedal edema. The abdomen was distended and shifting dullness was present. Skin and mucous membranes were quite pale. The neck veins were distended and pulsating. The left heart border was percussed two cm. outside the midclavicular line. There was a soft systolic murmur at the apex. The liver was slightly tender and extended eight cm. below the costal margin in the right midclavicular line. No other abdominal masses were palpable. Small, discrete, non-tender, anterior and posterior cervical lymph nodes could be easily felt.

Laboratory Data: Urinalysis revealed three to four plus proteinuria with innumerable red and white cells in the sediment. The blood contained 6.5 Gm. per cent hemoglobin; 2,980,000 RBC's/cu. mm., 15,350 WBC's/cu. mm. with 86 per cent neutrophils and 14 per cent lymphocytes. B. U. N. was 100 mgm. per cent; the serum protein and A/G ratio were reported as being within normal limits. The blood Mazzini was negative.

Hospital Course: The patient continued a steady downhill course despite rapid digitalization with digitoxin and divided doses of morphine sulfate for rest. On the third hos-

pital day it was noted that he appeared somewhat more somnolent and lethargic, with a heart rate of 120 and gallop rhythm. Hypertonic solutions of glucose were given intravenously without perceptible effect. On the fifth hospital day he appeared somewhat irrational; however, the pulse had declined to 80 and rhythm appeared more regular. An E. C. G. at this time showed a partial heart block, recurrent ventricular extra systoles, and left ventricular hypertrophy. On the 10th hospital day a pericardial friction rub was heard and an x-ray examination revealed that the heart appeared markedly increased in size with accentuation of the hilar vascular markings. There appeared to be somewhat more fluid in the chest than had been previously noted. At 2:30 p. m. on the 10th hospital day, the patient expired.

CLINICAL DIAGNOSIS

DR. GOODWIN: This young man presented first, symptoms of nausea, vomiting, oliguria, hematuria and edema. This in conjunction with later complaints of swelling of the face and abdomen immediately directs our attention to a primary renal disease. The past history of intermittent attacks of tonsillitis, until tonsillectomy at about the age of nine is significant in this respect. The statement that he had been told by a physician that he had a bad heart is of questionable significance in view of the negative statement regarding symptoms of rheumatic fever. The family history too deserves at least momentary consideration. It has been said that if you wish to live a long time you should carefully choose your ancestors with relation to a good cardiovascular system. Note that the patient's maternal grandfather died of a stroke, the paternal grandfather died of heart trouble, a maternal uncle died of kidney trouble, and a maternal great aunt died of dropsy.

Findings on physical examination are of more significance than is usually the case. The increased respiratory rate, 56, and the blood pressure of 160/110 are especially noteworthy. There was periorbital facial and pedal edema. Additional evidence of congestive failure is provided by the distended and pulsating neck veins, the dilated heart and the swollen tender liver. Ascites was probably responsible in part to congestive failure, and perhaps also to whatever cause we may subsequently attribute the edema. If we had not already reached this decision, a consideration of the laboratory data would make it obvious that we are dealing with

some very important renal disease. Note that there was three to four plus proteinuria with innumerable red and white cells in the sediment. Note also that the blood urea nitrogen was 100 mg. per cent. A picture of this type, speaking generally, may signify any one of three conditions: (1) acute post-infectious nephritis; (2) renal lesions which follow certain types of poisons, notably heavy metals; and (3) a primary vascular disease which involves indirectly the kidneys. Rheumatic fever should be considered for a moment in view of the past history, and because this individual falls into the age group which is commonly affected by rheumatic fever. I think that rheumatic fever in itself, however, would be insufficient to account for all this patient's signs and symptoms. I can think of but one diagnosis which will explain all of the signs and symptoms observed and that is *glomerulonephritis*. Renal involvement may occur in rheumatic fever and approximately three per cent of patients with rheumatic fever exhibit renal involvement. However, approximately 25 per cent of those suffering from acute nephritis will show some form of cardiac involvement not unlike that which characterizes rheumatic fever. There seems to be some direct relationship between glomerulonephritis, rheumatic fever, lupus erythematosus disseminata, periarteritis nodosa and certain other inflammatory conditions which affect primarily blood vessels. Before we conclude with our diagnosis, there are several other conditions that must be considered. *Disseminated lupus erythematosus* could account for this picture rather well. Against disseminated lupus is the fact that males are rarely affected, there usually is a rash, but not in this case, and leukopenia is rather characteristic in contrast to the leukocytosis of 15,350 observed here. None of these points is sufficient to exclude disseminated lupus as a possibility, however. The degree of uremia is not usually so marked in lupus as has been observed here. On the positive side of the ledger, however, it should be pointed out that lupus erythematosus disseminata, a disease which involves arterioles primarily, usually affects the kidney more than any other organ or tissue in the body and can readily be responsible for marked proteinuria, hematuria and at least a moderate degree of renal failure. *Periarteritis nodosa*, a condition which has much in common with disseminated lupus, can occur at almost any age, but is more common in younger persons. In this condition the lesion is not apt to be so diffuse as in lupus. Small

arteries are involved rather than arterioles so that clinically a striking characteristic is obvious involvement of multiple systems within the body. As a result the diagnosis is usually confused by a marked diversity of symptoms. I think one cannot absolutely exclude periarteritis nodosa in this case. This diagnosis is unlikely because periarteritis nodosa is quite uncommon and, furthermore, a primary renal disease can very well explain all the signs and symptoms which this patient had.

If we conclude that this is a case of glomerulonephritis our work is not yet done since we must try to determine what stage of the disease is present. This is very difficult to do. I believe Bright originally stated that the number of classifications of nephritis is as varied as the number of classifiers. The etiology of glomerulonephritis, as in the case of some of these other vascular diseases we have mentioned, is closely related to infections with the hemolytic streptococcus. This is well illustrated clinically by the frequency with which an attack of glomerulonephritis follows either a mild or severe streptococcal pharyngitis. The disease is not a part of the bacterial infection but rather a complication which follows it. It is probably an allergic reaction to products of the streptococcus.

Considering the duration of illness here, obviously we are not dealing with a long continued chronic glomerulonephritis with repeated episodes of exacerbation following periods of latency. We are dealing with glomerulonephritis somewhere between the subacute and chronic stage. The line of demarcation between these is far from definite. The degree of anemia is more profound than one ordinarily sees in acute glomerulonephritis, and also the distribution and extent of edema. Although marked edema of the face is frequently seen in acute glomerulonephritis, ascites and dependent edema of the feet and ankles are more often characteristics of chronic glomerulonephritis. This patient's first symptoms occurred almost three years ago, and there has apparently been sufficient time to develop renal hypertension with subsequent congestive heart failure. It would seem then that this patient has glomerulonephritis which might be considered as early chronic, or at least as an acute exacerbation of a disease which is a minimum of two and one-half years old and which has presented periods of latency. So much for the nephritis. We turn then to the respiratory difficulty and the hemoptysis which figured prominently in the terminal

event. This could be due to cardiac failure or a pneumonic process or pleural effusion, and I think that pleural effusion accounts for a good portion of this. Pulmonary edema and passive congestion of the lungs as an effect of chronic passive congestion must also have a prominent part in this terminal picture. There is one point which is difficult for me to evaluate and which I hope that Dr. Hopps will discuss. That is the possible ill effects from the diuretic which was given early in the course of this patient's glomerulonephritis. It is not beyond the realm of possibility that it was the administration of a mercurial diuretic which led to the very unfortunate consequences which have been described to us. Most cases of glomerulonephritis undergo spontaneous recovery without further event. Here is a boy who developed glomerulonephritis and apparently recovered for a time only to develop another attack which caused his death.

CLINICAL DISCUSSION

QUESTION: What is the possible relationship of diphtheria to this illness?

DR. GOODWIN: There was an interval of approximately 10 years following the attack of diphtheria before any evidence of renal involvement. The diphtheria which occurred at the age of five years would appear to be entirely incidental to the condition which we have discussed.

QUESTION: Would it be possible for this patient to have had rheumatic fever in addition to nephritis?

DR. GOODWIN: Yes, it is possible; the two diseases do occur together, perhaps more commonly than one would expect simply by chance alone.

QUESTION: What do you think is the significance of the soft systolic murmur at the apex?

DR. GOODWIN: I believe that the cardiac changes which this patient experienced can be explained as a consequence of hypertension, and I do not believe that there were any significant valvular lesions. This murmur was probably a functional one and related to dilatation of the mitral valve ring in conjunction with rather marked anemia.

QUESTION: What about the considerable number of white blood cells in the urinary sediment, is that indicative of infection?

DR. GOODWIN: I believe that this represents a superimposed terminal infection of the urinary tract and, as such, is probably incidental to the major disease.

QUESTION: Isn't it unusual to find normal serum proteins and a normal albumin globulin ratio in glomerulonephritis?

DR. GOODWIN: It is unusual, but compatible with the stage of the disease we are considering here. This patient had an acute attack approximately two and one-half years ago and a period of prolonged remission. The attack we are considering now represents a rather acute exacerbation without sufficient time to deplete the patient of serum albumin or to interfere with protein synthesis.

QUESTION: Under those conditions how would you explain the edema this patient has?

DR. GOODWIN: The edema may have been due to any one of three processes. It may have been on a toxic basis associated with the nephritis and due to an increase in capillary permeability. It may have been an effect of retention of sodium ions; and third, hypoproteinemia may have existed, which was not evident on laboratory examination because of a relative hemo-concentration or perhaps because of an error in the determination.

ANATOMIC DIAGNOSIS

DR. HOPPS: At necropsy, the patient was fairly well nourished, which is somewhat against a marked loss of protein with resultant hypoproteinemia. There was edema of the lower extremities which extended up to the thighs, and also edema of the scrotum. Edema of the face and trunk was not grossly evident. The peritoneal cavity contained approximately 500 cc. of pale straw colored fluid. The liver margin projected slightly below the costal margin as had been reported upon physical examination. The pleural cavities contained very little excess of fluid. The pericardial cavity, on the other hand, contained approximately 125 cc. of slightly turbid fluid. The epicardial surface was slightly roughened and had lost some of its luster. This slight inflammatory reaction was characteristic both grossly and microscopically of uremic pericarditis. The heart was moderately dilated, the transverse diameter was 15 cm. versus 25 cm. for the transverse diameter of the chest at this level. The heart weighed 375 gms., only a slight increase in weight. The major increase in size was an effect of dilatation. Other evidence of dilatation was a rounding of the apex of the heart and a flattening of the trabeculae carneae, especially in the left ventricle. The lungs were slightly increased in weight,

somewhat tougher than usual and presented a slight bronze discoloration. The spleen was slightly increased in weight and was somewhat firmer than normal. The liver weighed 1850 gms. instead of the usual 1500 gms., and presented moderate nutmeg mottling. So far then, we have evidence of edema which involved the various serous cavities as well as dependent portions of the body, slight cardiac hypertrophy with considerable cardiac dilatation and evidence of chronic passive congestion most pronounced in the lungs but involving also the liver and spleen.

The kidneys were quite similar. Each weighed 165 gms., a slight increase over normal. The capsule stripped away with slight difficulty, which means of course that there was slight fibrosis which made the capsule more adherent to the surface of the kidney. The surface was slightly paler than normal, finely granular and dotted with occasional tiny petechial hemorrhages. These were also evident on the cut surfaces. The pelves, ureters, and urinary bladder were essentially normal so that the gross picture was rather characteristic of glomerulonephritis. The question arises now that Dr. Goodwin brought up before, namely, what type of glomerulonephritis are we dealing with in this case? The problem of classification is complicated by the fact that the course of this disease is so often interrupted by long periods of latency. In a given case of glomerulonephritis, the onset may have been many years ago, and yet the case may present an acute exacerbation with all the characteristics of acute glomerulonephritis. Thus, in spite of a history extending back many years, the predominate changes which we observe grossly and under the microscope may indicate an inflammatory reaction of but two to three months duration. Should we call this chronic glomerulonephritis or acute glomerulonephritis? Perhaps the best terminology to use in such a case is to call it chronic glomerulonephritis with acute exacerbation. I think that is essentially the picture that we have here. We do not rely just upon the past history to arrive at such a classification, but evaluate very carefully, as to age, the various histologic changes. In this case, although the more acute reaction predominates, there is definite evidence of a much older process — one which corresponds to the attack of two and one-half years ago.

As you are aware, most cases of glomerulonephritis completely resolve, never to cause subsequent trouble. A very small per-

centage may actually die in the acute stages. A slightly greater number die in the sub-acute stage — to me, subacute glomerulonephritis is a condition in which there is *progressive active glomerulonephritis* from the onset, with death almost invariably occurring within four to six or eight months after the initial onset of the disease. By far the largest group of those who suffer serious consequences from glomerulonephritis appear to completely recover from their first attack. Subjectively they feel well and objectively it requires a most detailed examination of the urine to detect the smoldering latent glomerulonephritis that is persistent. The period of latency may last for months or years before another acute attack and, after this, perhaps another period of latency, followed by another exacerbation and so on. Finally, usually a matter of years after the initial attack, the individual succumbs to renal insufficiency and uremia, or renal hypertension, or perhaps a combination of both.

Our final anatomic diagnosis was:

Glomerulonephritis, chronic, with acute exacerbation

Cardiac hypertrophy and dilatation (clinically, hypertension)

Chronic passive congestion of viscera

Ascites, hydropericardium and pedal edema

Pyelonephritis, slight, terminal

Pleuritis, fibrous, adhesive, right

Tuberculosis, fibroplastic (inactive) of tracheobronchial lymph node.

DISCUSSION

QUESTION: How do you explain the presence of numerous white blood cells in the urine?

DR. HOPPS: As Dr. Goodwin surmised, there was a superimposed terminal infection of the urinary tract. This was quite incidental to the major disease.

QUESTION: Did you find evidence of renal injury by mercurial diuretics?

DR. HOPPS: We found no evidence of such injury. If such had occurred, it was masked by the changes directly related to glomerulonephritis.

QUESTION: How do you explain the rather marked anemia?

DR. HOPPS: Of all signs and symptoms resulting from glomerulonephritis, the degree of anemia is probably of greatest prognostic significance. This is largely due to toxic depression of bone marrow function, although increased destruction of erythrocytes is also a factor. The loss of RBC's from the body, as a result of hematuria, is not a significant factor.

QUESTION: What was the basis for the systolic heart murmur?

DR. HOPPS: Dr. Goodwin was correct in his opinion that there were no lesions of the valve cusps. The mitral insufficiency which gave rise to the murmur was an effect of dilatation of the mitral valve ring plus anemia.

TWENTY-FIVE YEARS AGO

(Editorial Notes—Personal and General)

Dr. and Mrs. C. F. Loy, Wilburton, recently entertained forty members of the local Rook Club.

Dr. and Mrs. L. D. Hudson, Bartlesville, are making an extended trip to southern and eastern points.

Pittsburg County Medical Society has organized a Physicians exchange for the purpose of facilitating the calls and service of members of the society.

Dr. C. S. Summers has been appointed Designated Examiner for the Veterans Bureau for Tulsa following the recent discontinuance of the local office of the Bureau at that place.

Tulsa County Society entertained with a dance at the Elks Club Thursday, June 21, in honor of the ladies and in appreciation of their cooperation and labors extended during the Annual Meeting in May.

Dr. and Mrs. Walter Hardy, Ardmore, attended the Tulsa convention via aeroplane.

Dr. W. B. Newell, Enid, has been appointed superintendent of health of Garfield County.

Drs. J. M. Byrum, Shawnee, W. Albert Cook, Tulsa, and C. A. Thompson, Muskogee, are attending the San Francisco A.M.A. Meeting, where the two former will be delegates while Dr. Thompson will look after business and other interests of the State Medical Association.

Craig County Medical Society met at Vinita June 6, with the following announced program: "Some Phases of Our New Medical Law," Dr. J. M. Byrum, Shawnee; "Prostatic Enlargements," Dr. Julius Frisheer, Kansas City. A banquet was served after the scientific program.

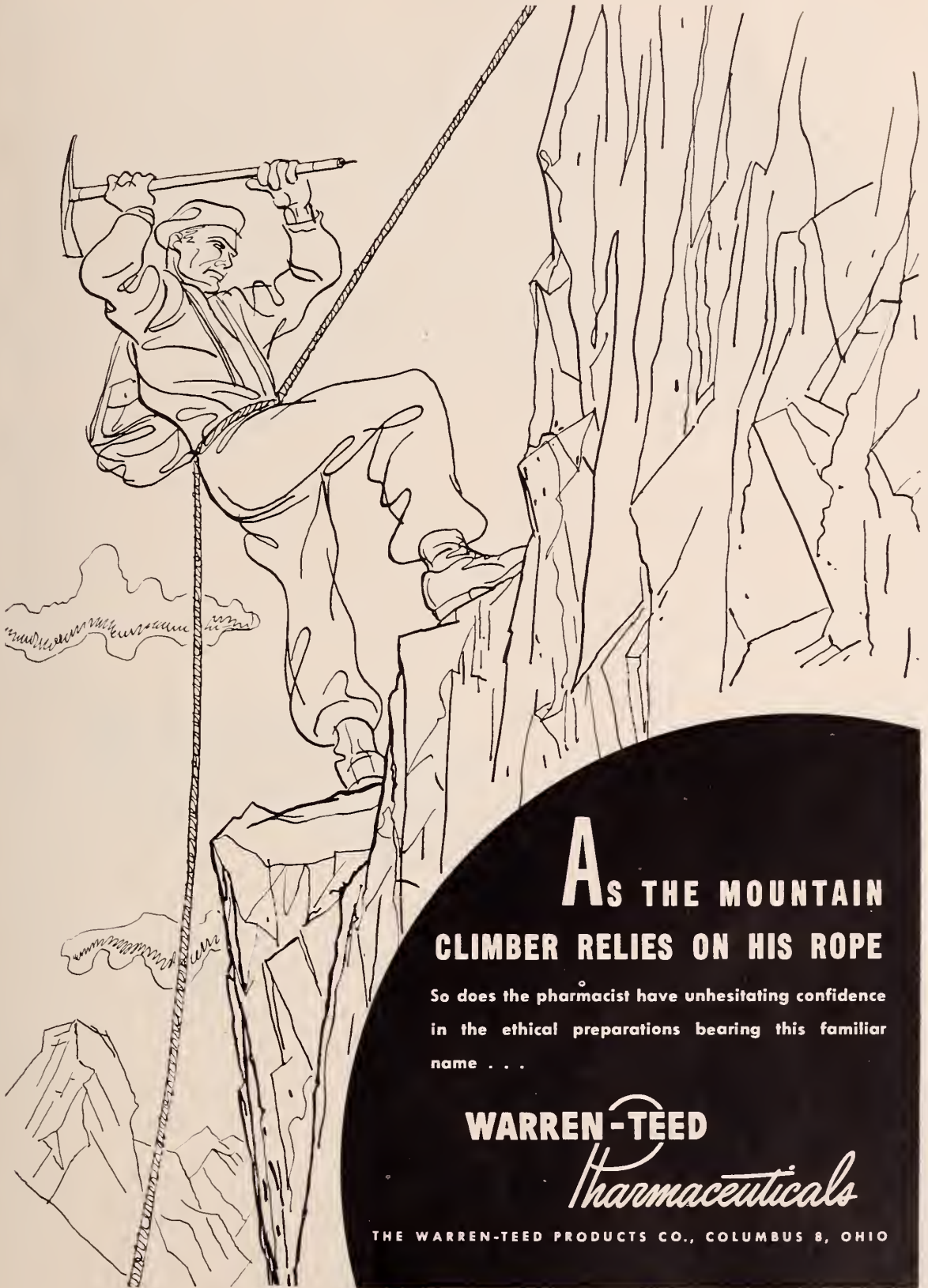
President's Page

Recently I visited several rural counties in Oklahoma. This visit thoroughly convinced me that organized medicine will have to extend its activities to the rural areas if adequate medical care is given to all the people. These areas need small hospitals and available medical doctors.

There are several small cities and a number of counties in our state that do not have a medical doctor under 70 years of age. If organized medicine does not lend every assistance in helping to serve these purposes within the next five years, the government will be justified in attempting to regiment medical education to the end that it would have control of the graduating physician and in turn to send him to the rural areas. The government may also be justified in constructing adequate hospital facilities even though it is an expensive and impersonal way to deal with patients. Government interference or control is not consistent with our American way of life. Since the emergency is great, however, something must be done soon. We should volunteer our assistance and attempt to see that suitable facilities are obtained in all needy areas of Oklahoma. We must plan some way to make these areas attractive to our young doctors. We must consider this problem now without delay or organized medicine will fail to do those things expected of it.

C. E. Northcutt

President.



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O. C. NEWMAN, M. D., ENLARGES HOSPITAL SIXTH TIME

O. C. Newman, M.D., Shattuck, pioneer Oklahoma physician, who holds an enviable record in the annals of medical history in Oklahoma, has completed another milestone for which his profession and the state of Oklahoma are justly proud. His profession joins with his many friends and patients of northwestern Oklahoma in paying tribute to his accomplishments both as a physician and a friend of humanity.

The mode of travel has changed from the four leg animal to a two wheel vehicle and finally to a four wheel vehicle in the span of years since Dr. Newman began practicing medicine in the early 1900's. Comparable to the evolution in transportation, Dr. Newman's facilities for the practice of medicine have changed from improvised operating rooms and hospitals in private homes to a modern clinic and hospital with one-half million dollars as the approximate material investment.

Graduating from the University of the South at Sewanee, Tennessee, in 1900, Dr. Newman went to Higgins, Texas, and from there to Grand, Old Day County, Oklahoma Territory, on the north bank of the South Canadian River in a sparsely settled country. His first five years were fruitless financially and necessitated other sources of income besides his profession, including county political offices.

In 1905 he returned to the Medical College of Ohio, University of Cincinnati, for what was known at that time as post-graduate specialized study. He returned to Grand in 1906 and moved to Shattuck October 30, 1907, because it was on a railroad. He established his first hospital in Shattuck but it was closed in 1908 because of financial reverses.

He did general practice and surgery, operating in homes or any place available until 1914 when a home in the town of Shattuck was converted into a hospital. At times it was necessary to group his patients in two or three different homes. Dr. Newman's hospitals were under direct supervision of registered nurses. This continued until 1918 when he was in the armed services. But, December 4, 1918, the people of the Shattuck community and surrounding territory sent a petition directly to the commanding officer of his camp stating their needs for the local

surgeon, and within 48 hours he had returned to his practice.

His first brick hospital, 12 rooms and modern for its time, was built in 1924 and in 1927 he built his first hospital that included x-ray, laboratory, etc. This was a 24 room hospital and in 1929 it was necessary to add 16 more rooms, plus nurses quarters. His associate at that time was John P. Davis, M.D., and Dr. Newman and Dr. Davis practiced together through the dust bowl period until 1934 when one of his sons was added to the practice. The next year two more of his sons came into the hospital.

Again in 1937 the hospital was enlarged and at this time a clinic was joined to the hospital, doubling the capacity and adding more modern and necessary equipment. Ten years later in 1947 the hospital and clinic was again doubled in capacity and this improvement, consisting of complete x-ray and x-ray therapy, physio-therapy and pharmacological facilities, and increased staff, was completed in April, 1948.

The present building consists of 60 beds with the recent addition completely air conditioned. There are no wards.

Since 1912, Dr. Newman has continued active postgraduate work. He has spent three to six weeks each year in postgraduate work throughout the country. Continuously from 1912 to 1947, he took 32 postgraduate courses in addition to yearly visits for observation of surgery at the Mayo Clinic for 31 consecutive times. This postgraduate work was interrupted only by national emergencies in 1918 and from 1941 to 1945.

Elected to the Hall of Fame in 1943, other offices he has held include: member of the Board of Medical Examiners since 1939, member of the board of examiners for Basic Science, vice-councilor of O.S.M.A., and he is a member of the American College of Surgeons.

Dr. Newman is chief of staff of surgery and consultant in the clinic and hospital and other physicians associated with him are R. E. Newman, A.B., M.D., F. S. Newman, M.D., M. H. Newman, M.D., F.A.C.S., A. L. Buell, A.B., B.S., M.D., J. J. Smith, B.S., M.D., and J. C. Wilborn, D.D.S., Leslie Miller, X-ray, A. L. Nicholson, Ph.G., and L. R. Sidders is manager.



“...such as Metamucil...”*

For the treatment of the spastic colon the author suggests diet, elimination of the nervous element and “bulk producers.” As examples of these he lists “agar-agar, in finely powdered form, in flakes, or in cereal-like form; derivatives of psyllium seed, such as Metamucil”*



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*Glafke, W. H.: *Spastic Colon*, *M. Clin. North America* 26:805 (May) 1942.

†Council on Pharmacy and Chemistry: *New and Nonofficial Remedies*, 1947, Philadelphia, J. P. Lippincott Company, 1947, p. 320.

GENERAL NEWS

ANNUAL MEETING SETS ATTENDANCE RECORD

When a total of more than 900 doctors of medicine were registered at the 55th Annual Meeting of the Oklahoma State Medical Association, an attendance mark topping that of any previous meetings of the group was set. Held at the Skirvin Hotels, Oklahoma City, the 55th annual session of the group began with the House of Delegates meeting Sunday, May 16, and other scientific meetings and social events continued through Wednesday, May 19.

Election of Officers

Incoming president is C. E. Northcutt, M.D., Ponca City. New officers elected are: George Garrison, M.D., Oklahoma, president-elect; Violet Sturgeon, M.D., Hennessey, vice-president; L. Chester McHenry, M.D., Oklahoma City, speaker of the house; A. R. Sugg, M.D., Ada, vice-speaker; James Stevenson, M.D., Tulsa, delegate to the A.M.A.; Finis Ewing, M.D., Muskogee, alternate delegate; and John Burton, M.D., Oklahoma City, alternate delegate.

Councilor and vice-councilor positions filled included: district five, J. Hobson Veazey, M.D., Ardmore, councilor, and O. J. Hagg, M.D., Waurika, vice-councilor; district eight, Shade Neely, M.D., Muskogee, councilor, and W. Jackson Sayles, M.D., Miami, re-elected as vice-councilor.

Scientific and Social Program

Fifty scientific papers were presented during the three days of the meeting with separate sections on medicine and surgery set up in the morning and general sessions during the afternoon. Nine out-of state physicians were guest speakers. (All scientific papers given at the meeting will be published in the Journal with the first group from the 1948 meeting appearing in this issue.)

The roundtable luncheons were a popular phase of the 1948 meeting with each roundtable being oversold. The symposium, "What's New in Medicine?," given Tuesday night, May 18, and participated in by all of the guest speakers was presented to an overflow audience.

A golf tournament held Monday afternoon, May 17, at the Oklahoma City Golf and Country Club, attracted 32 physician-golfers as participants. Low gross winner was Jimmy Amspacher, M.D., Oklahoma City, and E. B. Neff, M.D., Oklahoma City, was runner-up. In the handicap, Carryl Wiggins, M.D., Stillwater, was winner and Ben Nicholson, M.D., Oklahoma City, was runner-up. P. M. McNeill, M.D., Oklahoma City, lead the group of "men past 50."

Held at the same time as the golf tournament was the skeet shoot and Athol Frew, M.D., Oklahoma City, copped first prize. The shoot was held at the Nichols Hills Skeet Club.

Fifty Year Pins

Concluding the convention activities was the president's inaugural dinner-dance held in the Silver Glade Room of the Skirvin Tower Wednesday night, May 19. Onis Hazel, M.D., Oklahoma City, acted as master of ceremonies and outgoing President Paul Champlin, M.D., Enid, presented the gavel to the new president, C. E. Northcutt, M.D.

An innovation of the meeting was the presentation of Fifty Year pins to members of the profession who have been in active practice in excess of this length of time. This will be an annual highlight of the meeting. Twelve were present at the dinner to receive the awards from the president, Dr. Champlin.

Speaker for the dinner was Alan R. Mortiz, M.D., of the department of legal medicine, Boston, Mass. Dr. Moritz spoke on "Medicine's Contribution to Crime Detection."

Next year's Annual Meeting will be held at the Mayo Hotel, Tulsa, May 15-19.

POSTGRADUATE CIRCUIT SLATED FOR AUGUST

The next circuit in postgraduate medical teaching will begin in Enid, Woodward, Guymon and Alva the week of August 9. J. R. B. Branch, M.D., who has been especially successful in all the preceding circuits, will present the course.

At a meeting of the State Postgraduate Committee, during the recent Annual Meeting of the Oklahoma State Medical Association, many problems confronting postgraduate teaching were discussed. The committee is now seeking a competent instructor in internal medicine, which course will begin immediately following the present course in gynecology.

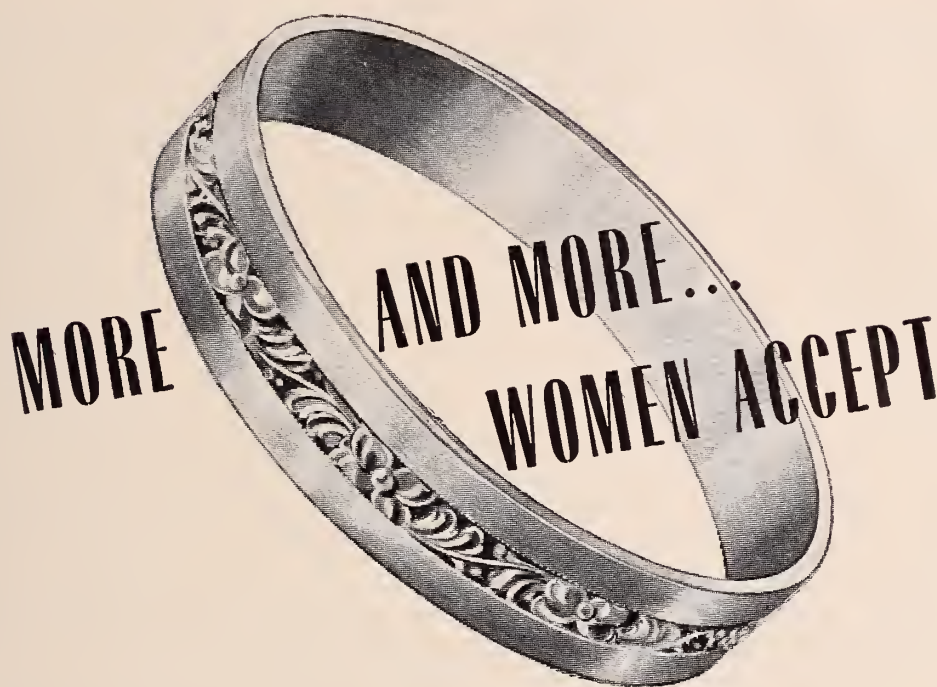
The local committees in each center are again urged to provide comfortable, convenient facilities for the lectures. In the past it has been necessary for Doctor Branch, in some cases, to find the key, open the hall, and almost carry out the janitor work before the lecture begins. This should all be attended to by the local committee.

In making plans for the coming course in internal medicine, the committee again urges suggestions from the doctors throughout the state.

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 PRESIDENT

ANNOUNCEMENTS

HAVE YOU HEARD?

PSYCHOSOMATIC COURSE IS WELL ATTENDED

Sponsored jointly by the department of psychiatry and neurology of the University of Oklahoma School of Medicine and Oklahoma State Department of Health, the postgraduate course in psychosomatic medicine was well attended with approximately 220 enrolled for the five lectures.

Theodore A. Watters, M.D., New Orleans, neuro-psychiatrist and former head of the department of psychiatry at Tulane University was guest speaker. The course met June 7 in Oklahoma City; June 8, Tulsa; June 9, Ada; June 10, Lawton; and June 11, Enid. Lectures by Dr. Watters were followed by panel discussions.

S.M.A. NAMES MIAMI FOR 1948 MEETING

Miami, Florida, has been chosen as the meeting place for the Southern Medical Association's forty-second annual meeting. The S.M.A. will be held October 25-28.

The second largest general medical group in America also met in Miami in 1946 and selected Miami again this year because enough hotel space is available in that city to house the guests of a large convention comfortably.

ANESTHESIOLOGISTS TO HAVE ASSEMBLY IN N. Y.

The third anesthesiologists postgraduate assembly will be held in New York City December 9 and 10 at the Hotel New Yorker. Last year's meeting, which is sponsored by the New York State Society of Anesthesiologists, boasted the largest registered attendance of any anesthesia society meeting in many years.

RADIOLOGISTS MEET

The Oklahoma State Radiological Society held its meeting on May 17, at the Skirvin Hotel, Oklahoma City, with L. H. Garland, M.D., San Francisco, as a guest of the group. Newly elected officers of the society are: P. E. Russo, M.D., president; H. B. Yagol, M.D., vice-president; and W. E. Brown, M.D., secretary-treasurer.

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FOR SALE: Equipment—short wave diathermy like new, hay fever machine, violet ray, complete set of office instruments. Write Key A, care of the Journal.

FOR SALE: 1940 Century model picker, Waite radiographic and fluoroscopic machine. Complete darkroom equipment. Everything in excellent condition. Write Key R, care of the Journal.

George S. Barber, M.D., Lawton, attended the Rotary International annual convention in Rio de Janeiro as an official delegate representing 29 Rotary clubs.

Felix Adams, M.D., Nowata, was one of the winners in the annual Flag Day golf tournament held in Nowata.

A. W. Truman, M.D., Ardmore, spoke recently at the Springer Methodist church with "Taking a Trip to the Stars" as his topic.

Henry D. Wolfe, M.D., Hugo, was re-elected president of the Choctaw County Tuberculosis Association at the annual meeting of the group.

W. W. Cotton, M.D., Atoka, discussed Blue Cross at the May meeting of the Atoka Business and Professional Women's Club.

H. L. Johnson, M.D., Fort Supply, spoke on mental hygiene when he was guest speaker at a meeting of the Buffalo Delphian club.

Paul F. Smith, M.D., formerly of Durant, has moved to Carnegie, where he will be associated with the Carnegie hospital.

C. W. Arrendell, M.D., and *E. H. Arrendell, M.D.*, have recently moved into their new clinic in Ponca City, which is located near the Ponca City hospital.

J. J. Kennedy, M.D., formerly of Carnegie, has recently opened an office in Edmond. Before practicing in Carnegie, Dr. Kennedy lived in Oklahoma City.

Joe L. Duer, M.D., and *Corliss C. Kepler, M.D.*, Woodward, announce the association of Ray J. Camp, M.D., with the Duer-Kepler clinic. Dr. Camp was chief of the surgical service of the U. S. army hospital in Heidelberg, Germany, for 20 months.

O. E. Templin, M.D., Alva, has been reappointed medical examiner for the Civil Aeronautics authority of that district.

H. C. Brown, M.D., and *C. Riley Strong, M.D.*, both of El Reno, were elected to the board of directors of the Canadian County Red Cross.

J. Clay Williams, M.D., is moving from Wewoka to Durant. Dr. Williams moved to Wewoka from Tulsa in 1941.

Vernon D. Cushing, M.D., Oklahoma City, has been appointed medical director of University Hospital in Oklahoma City. He will also serve as instructor in the medical school.

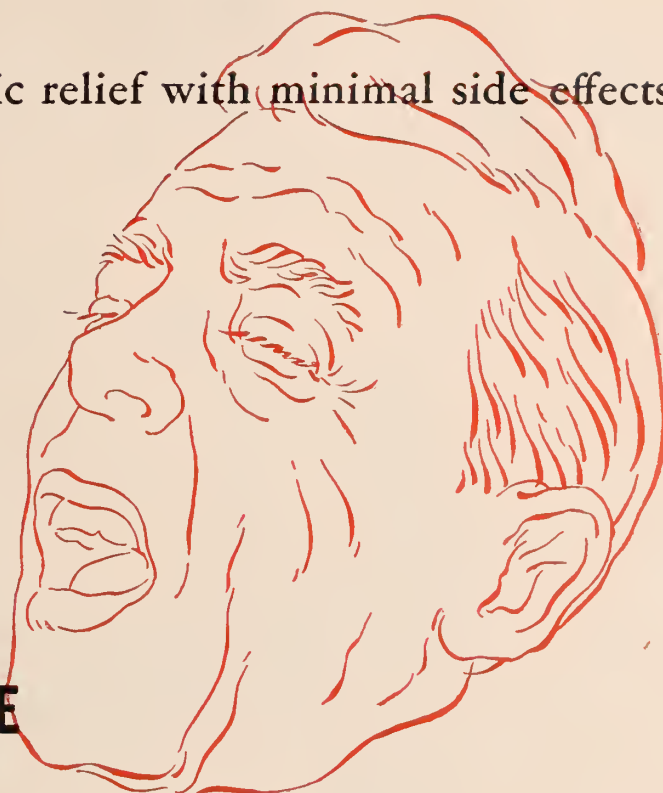
Edward M. Thorp, M.D., Cushing, and Mrs. Thorp have recently adopted a four month old baby girl and have named her Linda Ann.

John W. Shackelford, M.D., Oklahoma City, was elected president of the association of state and territorial directors of local health services at the annual meeting of the group April 22 and 23 at Lake of the Ozarks, Mo.

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1. ARBESMAN, C. E.: *N. Y. State Jl. of Med.*, 47: 1775, 1947.
2. LOVELESS, M. H.: *Am. Jl. of Med.*, 3: 296, 1947.
3. BERNSTEIN, ROSE and FEINBERG: *Ill. Med. Jl.*, 92: 2, 1947.
4. OSBORNE, JORDON and RAUSCH: *Arch. of Derm. & Syph.*, 55: 318, 1947.

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BOOK REVIEWS

THE ACUTE BACTERIAL DISEASES (THEIR DIAGNOSIS AND TREATMENT), Harry F. Dowling, M.D., F.A.C.P. Clinical Professor of Medicine, George Washington University; Cloth, Pp 465, Philadelphia, W. B. Saunders Co., 1948.

This is a well written book, in large print on glossy paper by an authority on the subject material contained therein.

In the first 100 pages, certain general factors in the diagnosis of the infectious diseases are considered, and the acute infectious diseases are grouped together according to their outstanding clinical features. The general measures available and the principal agents employed in the treatment of bacterial diseases (serums, sulfonamides, penicillin and streptomycin) are discussed.

The remainder of the book has been devoted to a discussion of individual diseases. These have been classified according to the etiologic agent responsible for them. Part II comprises the diseases caused by the cocci and Part III those caused by bacilli. In Part IV are the diseases primarily due to exotoxins. In the final chapter, a number of less frequent or less important bacterial infections are taken up briefly.

The book is filled with many excellent charts, diagrams, illustrations, and colored photographs. At the end of each chapter, there is a list of references to original papers. An adequate index is appended.

The book is intended as a practical guide for physicians and interested students. The subject material is up to date and there is certainly a place for this book in a well-rounded library of the general practitioner. —J. W. Morrison, M.D.

SUCCESSFUL MARRIAGE, Edited by Morris Fishbein, M.D., and Ernest W. Burgess, Ph.D.; Cloth. 547 pages. Doubleday & Co. 1947.

This book is a completely frank and easily understandable discussion on every problem relating to family living from courtship to the education of children. The realization that 34 out of every 100 marriages end in divorce and that many such divorces are preventable, undesirable, and unnecessary leads to the conviction that the publication of this book is exceedingly useful from the point of view of the individual, the family, and the state.

Thousands of questions, from the beginnings of sexual attraction to the final rearing of a family, are answered on the basis of long counseling experience by 38 outstanding doctors and advisers on marital relations. The book is developed in various parts devoted to specific phases of the whole problem. It begins with a statement concerning the profession of marriage counseling, considers next the questions that arise related to falling in love, choosing a mate, and marriage. The book then considers the sexual problems of marriage and describes the anatomical and functional considerations, also the necessary premarital examinations — both physical and psychological. Another section concerns disturbances in married life, then conception, pregnancy, and childbirth. A fourth part is concerned with the child in the family, and the fifth portion with the many social problems that disturb marriage from many points of view.

The book is written in plain style using simple, everyday words and should be understood readily by nearly anyone. As one reviewer has previously put it, "A wide reading and understanding of this book could greatly

increase the happiness in this world and could also aid greatly in rearing well-adjusted children." —J. W. Morrison, M.D.

A HISTORY OF MEDICINE. Douglas Guthrie. 448 pages with illustrations; Philadelphia: J. B. Lippincott Company, 1946. Price \$6.00.

To fully appreciate the present in medicine the physician must be fairly familiar with the past. The author of this book has quoted Winston Churchill as having said "The longer you can look back, the further you can look forward." Thus the importance of medical history in the study and practice of medicine should be brought to the attention of every medical student. Guthrie's book, though relatively small, is fairly comprehensive. It is easy to read because of the author's pleasing style, and the publisher's commendable skill in the art of book making. These factors combined make this volume particularly valuable to teachers and students of medical history. Unfortunately, there seems to be very little room in the average medical school for this subject. In those schools with scant provision for medical history a few well chosen lectures, supplemented with this text will give the student a working knowledge of the evolutionary course the science and art of medicine has followed. The story is so well presented by the author it should require only a modicum of inspired leadership to carry the student swiftly through the past centuries. Properly employed, this book should make a formidable contribution in the cultural field of medicine. Physicians who failed to find anchor in the history of medicine during their school years would do well to read this fascinating informative story. It is never too late to get a firm grip on the golden thread of truth as it takes its uninterrupted course through the history of medicine.

It is to be hoped that this interesting, but limited, narrative may sharpen the reader's curiosity and lead him into broader fields where fascinating studies in the history of medicine may be pursued.

The method of presentation causes the reviewer to believe that many students with cultural inclinations may develop the urge for knowledge and carry on to intellectual heights with rich rewards. The book should be in every medical library. —Lewis J. Moorman, M.D.

Watch for these features in August issue:

Report of A.M.A.

Presentation of additional 50 Year Pins

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OBITUARIES

William Polk Longmire, M.D. 1881-1948

William Polk Longmire, M.D., died at a Sapulpa hospital June 1 after an illness of about six months.

Born in Anderson county, Tenn., he was graduated from the University of Kentucky medical school and took postgraduate courses at the American Hospital in Chicago and the New York Postgraduate hospital in New York. He came to Sapulpa 43 years ago from LaFollette, Tenn.

Dr. Longmire was on the board of governors of the American College of Surgeons. In addition to his medical activities, Dr. Longmire was a member of the First Baptist church, a past president of the Rotary club, a member of the Masonic lodge and also a member of the Akdar Shrine in Tulsa.

Survivors include his widow, one daughter and one son, and two brothers.

Clarence R. McDonald, M.D. 1882-1948

Clarence R. McDonald, M.D., pioneer Mannford physician died June 5 in a Tulsa hospital of coronary thrombosis. He had been ill for two weeks.

Dr. McDonald was born at Gansville, La. and was graduated from Vanderbilt University Medical School at Nashville, Tenn. in 1909. He served his internship and residency at Tulane University, New Orleans.

He began his practice at Broken Bow and practiced there until World War I. After serving as captain in the medical corps for two years, he returned and established his practice at Mannford. He was a 32nd degree Mason and Shriner with membership in the Consistory at McAlester.

Dr. McDonald served two different terms as president of the Creek County Medical Society and was also president of the McCurtain County Society when he practiced there.

Survivors are his widow of the home, and two daughters, Dixie McDonald, Tulsa, and Lois McDonald, a student at the University of Oklahoma.

V. C. Tisdal, M.D. 1886-1948

Victor Clifford Tisdal, M.D., Elk City, died May 18 in an Oklahoma City hospital following a short illness.

The widely-known physician was a former president of the Oklahoma State Medical Association and served as councilor for 20 years. He was also active in civic organizations and was a past president of the Elk City Rotary club. He became a 32nd degree Mason in 1918 and was worshipful master and a charter member of the Hammon Masonic lodge in 1910. He had served as high priest of the Elk City chapter, Royal Master, and as eminent commander of the Elk City Commandery.

Since 1910 he had served as surgeon of the M-K-T railroad and in the 1930's was chief of staff of the Western Oklahoma Charity Hospital at Clinton. Since 1915 Dr. Tisdal had been surgeon for the Rock Island railroad. He was a former president of the Southwestern Wolf Hunters association and four times president of the Oklahoma-Texas Wolf Hunters association.

Dr. Tisdal was graduated in 1910 from the Baylor University Medical school at Ft. Worth, Texas. He later studied and did postgraduate work at hospitals in Chicago, St. Louis and European clinics in Berlin, Vienna, London, Paris and Edinburgh, and he took special courses at the Mayo Clinic, New York, Chicago, St. Louis, Cleveland and Philadelphia. He was a surgeon in the first World War. Dr. Tisdal served as Elk City mayor two terms and in 1936 was voted Elk City's "most useful citizen." He had served on the board of stewards of the Methodist church since 1914 and had been a trustee of the church since 1915.

He is survived by his widow of the home and three children, V. C. Tisdal, jr., Elk City dentist, Mrs. W. T. Blalock, and Jack Tisdal, all of Elk City; three brothers, three sisters and two grandchildren.

Resolution

ON THE DEATH OF V. C. TISDAL, M.D., ORDERED BY THE COUNCIL OF THE OKLAHOMA STATE MEDICAL ASSOCIATION:

WHEREAS, the Author of all that is good in the world has seen fit to take Dr. V. C. Tisdal to his reward, and,

WHEREAS, his death occurred at the University Hospital on May 18 while the State Medical Association was in regular session and,

WHEREAS, he was president of the State Association 1945-46 and helped initiate many of the principles now championed by this organization, particularly the Public Relations Program,

THEREFORE, be it resolved that the members of the Council, keenly aware of his worth, saddened by his going and deeply conscious of their great personal loss, desire to record their appreciation of his fine qualities, his many abilities, his untiring energy and his abiding enthusiasm, so generously employed in the service of humanity and in support of organized medicine.

BE IT FURTHER RESOLVED, that a copy of this resolution be spread on the minutes of the Council meeting filed in the State Medical Association office and that a copy be transmitted to members of his bereaved family.

Respectfully submitted,
Lewis J. Moorman, Secretary-Treasurer
Oklahoma State Medical Association



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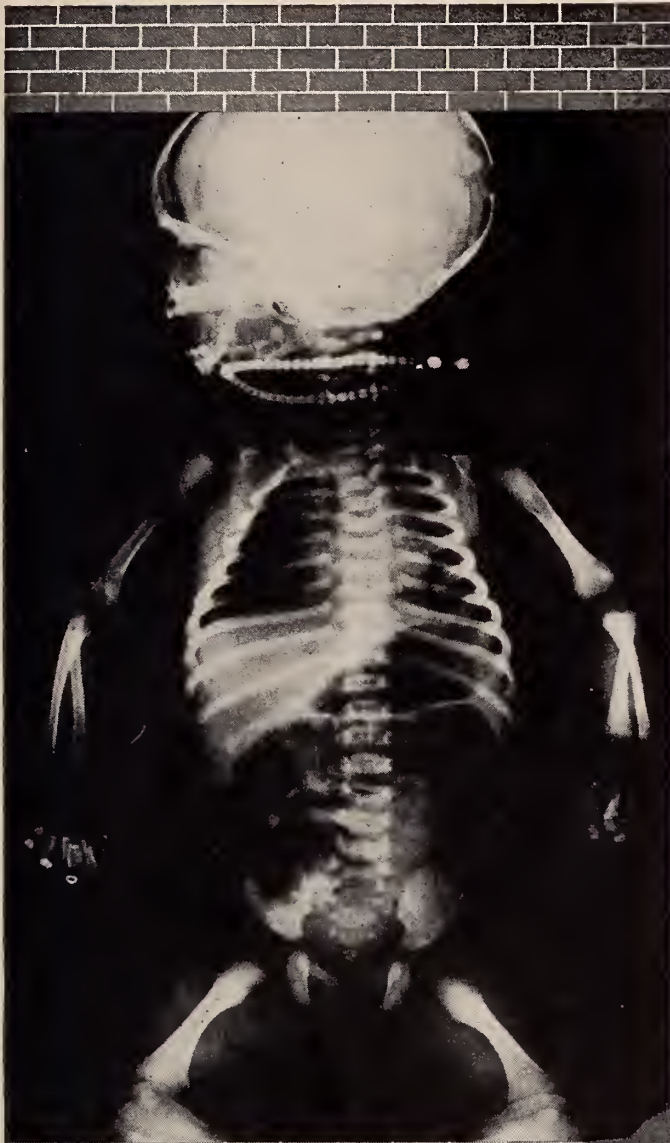
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MEDICAL ABSTRACTS

THE APPLICATION OF ELECTROMYOGRAPHY TO AFFECTIONS OF THE FACIAL AND THE INTRINSIC LARYNGEAL MUSCLES. B. Feinsten. *The Journal of Laryngology and Otology*, London. 61:554-557 (October) 1946.

Electromyography is a delicate device to estimate the damage to the lower motor neuron. It has been an aid in the diagnosis and prognosis of facial and laryngeal muscle affections. By electromyographic studies of 150 cases of facial paralysis the author found that the cases can be divided into two clearly defined groups:

In the first group the paralysis is due to direct or indirect trauma to the lower motor neuron. In the second group it is due to pressure by inflammatory edema on the nerve trunk in its course through the temporal bone, resulting in an ischemic block. In this group can be included the paralysis found in such conditions as Bell's palsy, herpes zoster and otitis media.

Facial paralysis following a head injury in the majority of cases is apparently due to an ischemic block rather than to an interruption of the axons. Hence, prognosis is usually good. If the axon is interrupted, recovery may occur but associated movements will be present in every instance. If the axon is completely interrupted, at least six months should elapse before operative procedures are to be considered. In such cases the electromyographic examination is valuable in detecting minimal degrees of reinnervation before the return of functional recovery. In cases where the mastoid tip of fractured and displaced ear is operation is justified.

Only 14 days after the head injury is it possible to differentiate between axon interruption and ischemic block of the facial (or any peripheral nerve by means of electromyography. This is the time when fibrillation commences. The demonstration of even a single repetitive motor unit action potential is of great prognostic significance in cases of so-called complete paralysis because it shows that a few nerve fibers have escaped damage.

In order to record the action potentials from the intrinsic muscles of the larynx it was necessary to use a concentric needle electrode of sufficient length so that all manipulations could be carried out through a laryngoscope.

Electromyographic examination has been found to be of value in cases of idiopathic laryngeal palsy. In a few cases of suspected muscular paralysis it was found that the immobility of the cords was due to ankylosis of the arytenoid cartilage. Vocal cord paralysis as a result of denervation of the intrinsic laryngeal muscles was diagnosed by the presence of fibrillation action potentials.

There are no untoward effects of the examination, except slight soreness.

FORTY-FIVE CASES OF PEANUTS REMOVED FROM THE LOWER RESPIRATORY PASSAGES. Maurice Bonnier. *The Annals of Otology, Rhinology, and Laryngology*, 56:784-789 (September) 1947.

Peanuts are the most damaging foreign bodies in the lower respiratory tract. The specific type of bronchitis they may cause is called arachidic bronchitis. The author observed a series of 45 cases of peanuts in the lower air passages in the lower air passages in Montreal, Canada. This group of foreign bodies represents 60 percent of all foreign bodies of the respiratory tract observed by the author during the last few years.

Most of the patients, with the exception of a man and a woman, were children from eight months to 10 years. There were 37 patients of this age group. Thirty of them had a definite history of having choked on a peanut. But in five cases nothing was suspected at time of bronchoscopy. Of these five, one had negative x-ray findings, two had atelectasis of the base of the lung, one had only a peribronchial thickening and the fifth had a generalized bronchopneumonia with atelectasis and consolidation at the right base.

The peanut kernel was found in the right bronchus in 30 children, in the left in 11 children, and in three children the peanut anchored in the trachea above the carina. The pieces of peanut kernel were usually big enough to stop and anchor in a main bronchus. The time of sojourn of the peanut in the bronchus varied from a few hours to 10 months. But, in children, two months was the longest time observed for a piece of peanut to be lodged in the bronchus.

In many cases, the clinical symptoms were far from being classic. The patient sometimes has only slight cough or wheezing. Some asthmatic wheeze was present in almost all cases. The children had but slight fever, and their blood count was approximately normal, showing only a slight decrease in the blood corpuscles.

Penicillin injections in many of the patients had an immediate effect on their well-being before the foreign body was extracted; the temperature dropped suddenly even to normal; the breathing became easier and there was much less indrawing. For the laryngologist also it became easier to work because there was less inflammation and edema, and the secretions were more easily aspirated. It has become a routine, therefore, at the clinic of the author to inject 100,000 or 200,000 units of penicillin per day in fractional doses until recovery. —Marvin D. Henley, M.D.

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THE PROBLEMS OF TINNITUS IN THE PRACTICE OF OTOLARYNGOLOGY. Albert P. Seltzer. *The Laryngoscope*, 47:623-231 (September) 1947.

Aural tinnitus still remains a problem to be solved. It is an abnormal sensation in the field of hearing, a symptom which may result from a great number of causes, many of them extraaural. It would be properly called "head noises" instead of ringing in the ear, the more so since the sounds may be perceived even by persons who have become deaf.

Fletcher made the statement that a high normal ear is capable of hearing a faint noise when in a sound-proof room; this sensation is a normal phenomenon, and it is due to the noise resulting from the jostling of the molecules. Since head noises are still heard after the cochlear nerve had been completely destroyed it is thought that an irritation of the central portion of the auditory system may be perceived as a sound of the nature of head noises, in a manner similar to the perception of touch and pain when the corresponding sub-cortical fiber tracts are stimulated. This tinnitus may be called the cryptogenic tinnitus.

The simplest source of noises in the ear is probably an accumulation of wax in the external auditory meatus, and its drumlike impact upon the tympanic membrane. Foreign bodies in the external auditory canal act similarly. Otosclerosis is the most constant intraaural cause of tinnitus. Head noises may be also caused by middle ear infection, nasal anatomical abnormalities, paresthesia of the acoustic nerve, tumor of the acoustic nerve, tumor

in the temporal lobe of the brain, or any intracranial tumor causing increase in the intracranial pressure.

Quinine among the drugs is well known as a cause of headnoises. Other drugs responsible for similar untoward effects are salicylates, ergot, aspirin, alcohol, mercury, caffeine, arsenic, morphine, etc. Streptomycin is an occasional source of tinnitus.

Hypertension is a frequent accompaniment of tinnitus, but since not all hypertensives, even among deaf persons, have head noises, it is apparently not the primary cause. Various metabolic disorders may be responsible for ringing in the ear. In case of spastic colon the ingestion of cellulose-containing foods cause an almost intolerable volume of noise. This reaction suggests a possible specific sensitivity.

In view of the many causes tinnitus is treated only on the basis of trial and error. Prostigmine had been tried for some time, but is now completely abandoned. Temporary relief was obtained by surgical excision of the stellate ganglion. Many vasodilator substances (acetylcholine, e.g.), vitamin C, etc. were tried with temporary good results. Magnesium sulfate acts by reduction of the intracranial pressure.

It is often successful to prescribe a liquid diet for three to four days, when noises often lessen, or sometimes stop entirely. Above all, one should remember that head noises occur in persons also who are entirely free of any evident or discoverable disease of the ear or of the body.—Marvin D. Henley, M.D.

MEDICAL SOCIETIES AROUND THE STATE

Garfield County

A panel discussion on "Differential Diagnosis and Treatment of Cerebral Thrombosis, Cerebral Hemorrhage, Subdural and Subarachnoidal Hemorrhage" was the program for the May meeting of the Garfield County Medical Society. Physicians taking part in the discussion were Charles J. Roberts, M.D., John A. McIntyre, M.D., and Hope Ross, M.D.

On June 11 the Garfield county group heard a lecture on psychosomatic medicine, which was sponsored jointly by the University of Oklahoma School of Medicine and the State Department of Health.

Another activity of the Garfield County Society was a picnic held June 24.

Comanche County

The Comanche County Society also attended the post-graduate course in psychosomatic medicine. The course was held in Lawton June 10.

Stephens County

The Stephens County Medical Society and Auxiliary held their monthly dinner meeting May 25 with Fred L. Patterson, M.D., and Fred L. Patterson, jr., M.D. as hosts.

Creek County

A discussion of infantile paralysis was given when the Creek County Society met in Bristow for the May meeting. Ian McKenzie, M.D., Tulsa, led the discussion.

Kay County

Two Tulsa physicians, E. Rankin Denny, M.D., and Berget H. Blocksom, M.D., presented the program at the May meeting of the Kay-Noble County Medical Society. Dr. Denny discussed "Management of the Edema" and Dr. Blocksom spoke on "Retropubic Prostatectomy." E. E. Waggoner, M.D., Tonkawa, was in charge of the program and the meeting was held in Tonkawa.

Blue Shield Tackles Actuarial Problem

Initial steps have been taken toward the development of comprehensive statistical studies for Blue Shield plans throughout the nation as critics have pointed an accusing finger at Blue Shield plans on numerous occasions, claiming their lack of actuarial soundness as a basic weakness.

Acknowledging the need for reliable statistical tables and data, leaders in the medical prepayment movement established Associated Medical Care Plans in 1946,

hoping that a national association of plans would provide a medium for such a service. The first step to be achieved is a national agreement on a uniform list of surgical and medical procedures.

An agreement on uniform coding system for the maintenance of statistical records is the next step to be taken and the third requirement would include national agreement on additional types of statistical data to be maintained.

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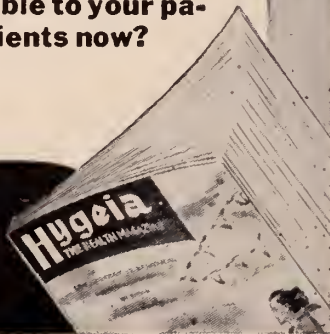
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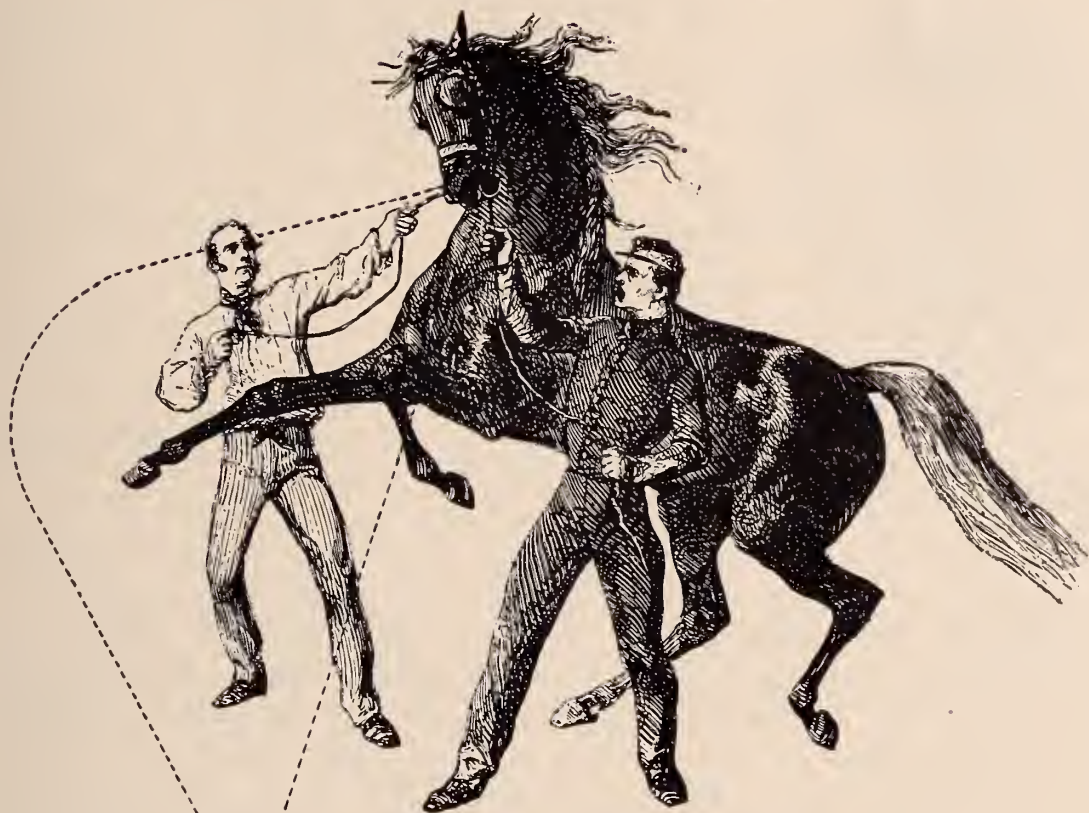
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MEDICAL SCHOOL NOTES

Dr. Ed W. Young (Med '47) visited the Medical School the first of May. Beginning July 1, he will be an assistant resident in medicine at Mercy Hospital, Baltimore, Maryland.

Dr. James Loucks (Med '47) will be in Oklahoma City after he completes his internship July 1, then on October 1, he will report to the Lying-In Hospital in Chicago for a residency.

Dr. Don Brawner (Med '47) has received an appointment in Surgery for the next year at the Medical College of Virginia Hospital.

In October, Dr. Eran Omer Burgert, Jr., (Med '47) will start a Fellowship in Pediatrics at the Mayo Foundation in Rochester.

Dr. Bill Omer Colemau, (Med '47), plans to stay at Kansas City General Hospital for a surgical residency another year.

After July 1, Dr. Jesse D. Cone, Jr. (Med '47) will be in Oklahoma City where he will be at the Medical School. He has a Fellowship in Anatomy under Dr. Lachman.

Dr. Charles E. Dehotal (Med '47) will be a resident in Pediatrics at the University Hospitals in Oklahoma City after July 1.

Dr. Daniel Friedman (Med '47) will continue at Queens General Hospital, Jamaica, Long Island next year as a senior interne.

Dr. Richard Davis Hoover (Med '45) has an assistant residency in Medicine at the University Hospitals, Baltimore, Maryland.

Dr. James Riley Winterringer (Med '45) will be an assistant resident in Obstetrics and Gynecology at the University of Maryland Hospitals this year.

Dr. E. G. Murphy (Med '45) has a residency in Pathology at the Hurley Hospital, Flint, Michigan, beginning July 1.

The May 22 Journal of the American Medical Association carried an article by Capt. Crawford Percefull (Med '45) and two other authors. Dr. Percefull is now stationed at the Veteran's Hospital, Fayetteville, Arkansas. The article is entitled "Tularemia in the Ozarks."

Records Available

The Veterans Administration announces that it has in its custody the majority of syphilis records of those army personnel who were treated for this disease while in active service, and in many instances can procure informative data from the syphilis records of other than army personnel. These records are available to physicians treating veterans if the veteran authorizes it. Results of spinal fluid examinations, and blood serologies are incorporated in the report.

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OFFICIAL PROCEEDINGS OF THE HOUSE OF DELEGATES OKLAHOMA STATE MEDICAL ASSOCIATION

May 16, 1948

Oklahoma City, Oklahoma

MINUTES OF THE FIRST SESSION

Sunday, May 16, 1948

The first session of the House of Delegates meeting held May 16, 1948 at Oklahoma City, was called to order in the Crystal Room, Mezzanine of the Skirvin Hotel at 2 P.M. by the Speaker of the House, Dr. George Garrison, Oklahoma City.

Following the call to order by the Speaker, the Chairman of the Credentials Committee, A. R. Sugg, M.D., Ada, stated that he and the members of the committee had marked the delegates and representative alternates present and that the records indicated a quorum was present.

The reading of the minutes of the last meeting of the House of Delegates, May 12, 1947 was called for and the following motion was made after the statement by the Speaker that the minutes had been published in the Journal immediately following the 1947 meeting. It was moved by L. C. McHenry, M.D., Oklahoma City, seconded by McLain Rogers, M.D., Clinton, that the minutes be accepted as published. The motion carried.

Following the adoption of the above motion, the Speaker, in compliance with the provisions of Chapter III, Section 4, Subsection (a) of the By-Laws, appointed the following Reference Committees: *Resolutions Committee*: James Stevenson, M.D., Tulsa, Chairman; C. M. Hodgson, M.D., Kingfisher; Onis Hazel, M.D., Oklahoma City; Everett King, M.D., Duncan; *Tellers of Elections*: John Cottrell, M.D., Henryetta; John Simon, M.D., Alva; K. N. Roberts, M.D., Stigler; *Sergants-at-Arms*: Lee K. Emenhiser, M.D., Oklahoma City; W. W. Cotton, M.D., Atoka.

At this time the Speaker stated that Clinton Gallaher, M.D., Secretary of the State Board of Medical Examiners had asked for time on the agenda. Dr. Gallaher was not in the room at the time and the Speaker stated that he would again call upon Dr. Gallaher.

The next item on the agenda was the report of the officers. Dr. Garrison called upon C. R. Rountree, M.D., Oklahoma City, Delegate to the A.M.A. for his report, the report follows:

A.M.A. Delegate Report to the House of Delegates

The House of Delegates of the American Medical Association met in June, 1947, in Atlantic City. This was perhaps the largest, and the most impressive medical assembly ever held in the North American continent. It celebrated the one-hundredth anniversary of the American Medical Association. In addition to almost 15,000 registrations there were a vast number of foreign delegates and representatives present for this session.

The House of Delegates met for three full days, and had a most extraordinary session. Among the various things which came out of the house, which I think you might be interested in are the following:

First, the Committee on National Emergency Medical Service was discharged and this body was re-instituted as a Council of Board of Trustees, to be known as the Council on National Emergency Medical Service. This seems to be a real progressive step, and the work of this group will go forward toward planning for medical care of civilians and military personnel in the event of a nation-wide emergency. A two-day scientific session for general practitioners at the time of the semi-annual

meeting of the House of Delegates. This was unanimously voted by the House and deemed to be a very progressive step forward.

Second, the change of the meeting place of the semi-annual sessions to convene in a different geographical district each year, at which time a two day session for general practitioners will be held. You will perhaps remember that the first general practitioner session was held in Cleveland in 1948. At this time there were some 3,000 general practitioners registered, and it is the opinion of this delegate that the meeting was a very decided success.

Third, a closer affiliation with the third and fourth year medical students, possibly by affiliate membership, and a re-establishment of a student section of the Journal and encouragement of presentation of scientific papers at county, state, and even national levels. Also, the study of the possibility of a student section of the scientific assembly. This question was given careful consideration by the House of Delegates and was approved in principle, but not in toto.

Fourth, the secretary in collaboration with the councils and bureaus to prepare an attractively illustrated booklet describing the various activities carried on by the association for distribution to graduating medical classes. This booklet has been in preparation, and was sidetracked by the work of the centennial session.

Fifth, further clarification of public relations activities of the Association. This is a most worthwhile endeavor, and your delegate earnestly requests your unstinted cooperation in this endeavor.

Sixth, more experienced representatives as speakers for lay groups and legislative bodies and the establishment of a speakers' bureau to assist these representatives. This is well known to many of our own state medical profession. It stems from the great administration of Dr. V. C. Tisdal, who not only visualized a speakers' bureau of such a character as the American Medical Association now proposes, but also a visual education program with motion pictures and illustrative diagrams which as yet has not reached the accumulative stage.

Seventh, greater utilization of the Woman's Auxiliary as an instrument in the field of public relations. We need not emphasize this matter any further. The women of our association have been grossly overlooked and when we utilize their service, our aims and progressive ideals will be enhanced thereby.

Eighth, the establishment by the House of Delegates of a committee on nursing problems. This is a need which has long been neglected. It is the advice of the speaker that this problem be taken up and solved as demands the best interest of our association at the earliest possible moment.

Ninth, better channeling of information to the House of Delegates of the activities of the departments, bureaus, and councils. Needless to say this is a most extraordinarily important phase of the Public Relations Bureau of either the state, county or a national organization, and the resolution speaks for itself.

Tenth, active cooperation by the association with governmental officials to work out a program for prompt medical service in case of another national emergency.

This function is probably delegated to the national emergency medical council which was enumerated above, and I am sure that this council is active and responsive to its responsibilities and will meet any situation which may arise now, or in the future.

Eleventh, the House of Delegates to take under advisement a future building program for the Association headquarters. This is a most important proposal. It implied that the present quarters of the American Medical Association are inadequate, and gentlemen, truly they are inadequate as far as physical facilities are concerned. We need a greater headquarters' office with more room, more space, and the provision for an expanded program for the future. We have at the present time grown out of our present location. Needless to say this is a large building, but we have yet to see where this thing might develop and we need a larger space.

These were the chief proposals which were presented at the Atlantic City session, and the House of Delegates of the American Medical Association approved these various proposals in principle, and many of them in toto. We feel that we have made definite steps forward to a unification and a greater organization of all the component parts of the American Medical Association.

At the Cleveland session which was held in January of 1948 a great deal of work was accomplished, but it was not so spectacular as the work which preceded this session in Atlantic City in 1947. At the Cleveland session, as you well know, and perhaps will not care to remember, the question of the rebate of the optometrists was brought out into the open, and discussed with considerable frankness. Your delegate believes that this problem can be solved to the satisfaction of all parties concerned. I do not believe that the reputable eye men are guilty of any wilful wrong doing and in the light of this I think the whole question should be settled and that the various men who might have occasion to be involved in such a practice report to their respective agencies privately, and that the matter not be aired publicly.

At the Cleveland session emphasis was laid on the 10-point health program of the American Medical Association. Doubtless you have heard of this program before, and perhaps you have heard and discussed the various points in the respective program, but nowhere, gentlemen, may I say, is there such a concise and complete statement as appeared in a publication of the National Physicians Committee which is entitled "The National Health Program." I take liberty, therefore, in calling to your attention to the 10-points of the national program of health, sponsored and originated by the American Medical Association.

1. Nutrition, housing, clothing and recreation. The American Medical Association urges a minimum standard of nutrition, housing, clothing and recreation as fundamental to good health and as its objective to be achieved in any suitable health program.

2. Preventive medicines and health departments. The provision of preventive medical services to professionally competent health departments with sufficient staff and equipment to meet community needs is recognized as essential in a health program. The principle of federal aid through provision of funds of personnel is recognized with the understanding that local health areas shall control their own agencies as far as has been established in this field of education.

3. Prenatal care and childbirth. The procedures established by modern medicine for advice to prospective mothers and for adequate care in childbirth should be made available to all at a price that they can afford to pay. When local funds are lacking for the care for

those unable to pay federal aid should be supplied with the funds administrated to local and state agencies.

4. Infant welfare and care. The child should have throughout infancy the proper attention, including scientific nutrition, immunization against preventable disease, and other services included in its welfare.

5. Hospitals. Health and diagnostic centers. The provisions of health and diagnostic centers, and hospitals necessary to community needs is an essential to good medical care. Such facilities are preferably supplied by local agencies, including the community, church and trade agencies which have been responsible for the fine development of facilities for medical care in most American communities up to this time.

6. Voluntary prepayment plans of hospital and medical care. The program for medical care within the American system of individual initiative and freedom of enterprise includes the establishment of voluntary, non-profit prepayment plan for medical care. The principles of such insurance contracts should be acceptable to the councils of the medical service of the American Medical Association and to the authoritative bodies of the State Medical Association. The evolution of voluntary prepayment insurance you get because of sickness admits also utilization of private sickness insurance plan which complies with the state regulatory statutes, and meets the standards of the Council of the American medical service of the American Medical Association.

7. Veterans need for hospital and medical care. A program for national health should include the administration of medical care, including hospitalization of all veterans and such medical care to be provided, preferably by a physician of the veteran's choice, with payment by the Veterans Administration through a plan mutually agreed upon between the Veterans Administration and the State Association.

8. Research for advancement of medical science. Research for advancement of medical science is fundamental in any national health program. The inclusion of medical research and a national science foundation, such as proposed in the Federal pending legislations is endorsed.

9. Volunteer health agencies, philanthropic fund. The services rendered by voluntary philanthropic health agencies, such as the American Cancer Society, The National Tuberculosis Association, The National Foundation for Infantile Paralysis, Inc., and by philanthropic agencies such as the Commonwealth Fund, and The Rockefeller Foundation, and others have been of vast benefit to the American people, and are the natural outgrowth of the system of free enterprise and democracy that prevail in the United States. Their participation in a national program should be encouraged, and the growth of such agencies when properly administered should be recommended.

10. Health education in prevention of diseases. Fundamental to the promotion of the public health and the alleviation of illness are widespread education in the fields of health, and the widest possible dissemination of information regarding prevention of disease and treatment by authoritative agencies. Health education should be considered as a necessary function of all departments of public health, medical associations, and school authorities.

These 10-point health programs have been adopted from the platform of the American Medical Association which is printed in a pamphlet and will be available to any upon request.

Following the above report it was *moved* by W. W. Cottou, M.D., Atoka, *seconded* by D. B. Ensor, M.D.,

Alva, and *carried* that the report of the A.M.A. Delegate be *accepted*.

The Chair recognized James Stevenson, M.D., Tulsa, Delegate to the A.M.A. and Dr. Stevenson supplemented the remarks of Dr. Rountree as follows:

"I was recently in attendance at the National Health Assembly in Washington, D. C. This meeting was called by Mr. Oscar Ewing of the Federal Security Administration. The Federal Security Administration, as you know, has now absorbed a great many functions including the taking over of the Public Health Service. At first only one member was allowed to attend the Assembly from the A.M.A. to represent American medicine. After protest a few others were invited to represent the A.M.A. There was not representation from State Medical Associations. After further protest, two were invited from Oklahoma to represent the Oklahoma State Medical Association." Dr. Stevenson continued, telling of the various panel discussions held at the Assembly and the arguments pro and con for organized medicine.

Following the above report, it was *moved* by McLain Rogers, M.D., Clinton, *seconded* by R. Q. Goodwin, M.D., Oklahoma City and *carried* that the report of the A.M.A. Delegate be *accepted*.

At this time, Dr. Clinton Gallaher, Secretary of the State Board of Medical Examiners had returned and was asked to give his message to the House of Delegates. Dr. Gallaher's message was as follows:

"Mr. Chairman and members of the House of Delegates, I have a letter here that I would like to read to you:

"Mr. Dick Graham, Executive Secretary,
etc.

Dear Dick:

"A large number of osteopathic physicians are complaining that the State Medical Association is not keeping faith with them in connection with the last legislation.

Nearly all the members of our profession have changed their signs on their doors and on their stationery to show that they are osteopathic physicians, but if you will take the trouble to go to the Medical Arts Building in Oklahoma City, you will find that comparatively few of your doctors here have had any regard whatsoever for this law. In the Osler Building they have had regard for it. I cannot feel that the medical profession is in good faith when they wanted this bill and now they won't help us by designating their own titles.

I have pointed out to you time and time again that what is sauce for the goose is sauce for the gander, and I cannot understand why the State Medical Association wants to insist on the osteopathic group designating their title and then they refuse to designate their own.

May I, also, call your attention to the fact that in Ardmore, in two of the large office buildings, not one single doctor has changed his designation?

We get repercussions from this every day. In fact, some of the osteopaths are determined to introduce legislation to repeal this Act. I could not join with them, of course, because I still believe it is good legislation, but to be perfectly frank with you, I don't think your profession has kept faith with me at all. I stuck my neck out in sponsoring these bills and certainly the members of the medical profession could very well designate their title. It wouldn't take any trouble at all to put "M.D." on their doors and windows. Yet, they are refusing to do it in many parts of the State.

How can I go to my Board and make a satisfactory explanation of this? Frankly, I am on the spot and I have confidence enough in you to believe that you will try to remedy this situation. It is not fair to leave me in this position of embarrassment.

May I hear from you at your earliest convenience?

Sincerely,

(signed) Walter Gray, Attorney
Oklahoma Osteopathic Assn."

After reading the letter, Dr. Gallaher continued, "There are laws on the statute books that cannot be enforced. Here is one case that is a challenge to your Board and to you as physicians. I do not wish to make threats of any sort but I will tell you this — before the osteopaths are permitted to repeal this law, there will be some indictments. The Board does not want to do this but the fact is that if we don't get this law enforced it is going to be repealed. It was felt by your Council that would be a fine law to have. The law was not introduced by us but by the osteopaths and Walter Gray sent it through — and we toss it out of the window. It is not right to do so and I want to appeal to each one of you to see that it is enforced."

The next order of business, stated the Chairman, would be the reading of the Council Report. Copies of the report were distributed among the members of the House and the Report was read by President Paul Champlin:

Council Report

In submitting this report the Council again desires to point out that the actions of this House of Delegates will govern the channels in which the profession in Oklahoma will move during the coming year.

Since any policies and programs adopted by the House of Delegates must be activated by the County Societies, it therefore becomes the duty of the Delegates to report the action of this House of Delegates to their respective County Societies.

As a premise from which to work and think, your Council calls to your attention that there are many organizations interested in raising or lowering taxes, etc., but it is doubtful if any other organization in Oklahoma except this one you represent today, is very much interested in how medicine is practiced in the State of Oklahoma. Therefore, our fight for free enterprise in our profession comes as a direct challenge to each of us.

Your Council would point out to each of you that in addition to the usual activities engaged in by your Association, there are many pressing problems confronting the profession in which we must at all times be alert and ready to participate and help. 1948-49 will be an election year for both our state and nation; military service for physicians will be a problem, medical education and Public Health advances call for our interest and cooperation, public and private agencies dealing in health matters must have our help and guidance. The problems of the Veterans and the Veterans Administration must be considered. And, above all else, we must not lose sight of the most important of all public relations concepts which, of course, is that of the daily relationship of the physician with his patient.

Your Council makes the following report on its stewardship for the past year and certain recommendations for the House of Delegates to consider as a program for the coming year.

Membership

The membership of the Association as of May 6, 1948 was 1376 compared to 1372 for the same date in 1947, or a gain of four. In addition to these paid memberships, there are 30 honorary and 8 associate members. Being proposed at this session of the House of Delegates are 15 honorary members and 16 life members, this last category having been created by the last House of

Delegates. Should all proposed honorary and life members be elected it will give the Association a membership based on the May 6 figures of paid members, a total membership of 1446.

While the paid and total membership is an increase over the previous year, your Council is of the opinion that this still does not include all eligible physicians in the state. Your Council recognizes that membership in this Association is a privilege and not a right and that the County Societies govern the admission of members, yet at the same time the Council would like to suggest that all County Societies should have a membership committee, the functions of which should, of course, be to make an effort to bring all eligible physicians residing in the jurisdiction of the County Society into its membership. In unity and numbers there is strength.

Budget

In compliance with Article 9, Section 2 of the Constitution, the Council submits the following budget for the coming year. Since dues must be set in advance of known budget requirements for the year ahead, the budget herewith submitted is predicated on the anticipated revenue from the Journal and with no raise in dues from the present \$22.00 of the \$42.00 now being allotted to the financing of the Association. The budget also does not include any appropriation for the Public Policy Committee, it being the opinion of the Council that the House of Delegates should consider this appropriation separately. (The Budget will be found at the last of this Report).

Journal

The Editorial Board is to be commended not only for the improvement in the Journal but for the excellent issue of the third Annual Directory which was published at no expense to the membership.

Finances

The finances of the Association have already been mentioned and are in satisfactory condition for its present activities excluding consideration of the Public Policy Committee's need for finances.

Income from the Journal for 1948-49 can be anticipated to decrease from the war years' high. However, the percent of decrease cannot be gauged too accurately since the majority of advertising contracts are placed in the last quarter of the year.

The Council recognizes that it is the obligation of the House of Delegates to set the dues for the Association for the coming year. In view of the discussion that will come before the House at a later time, the Council will make no recommendations until a decision has been reached by the House of Delegates as to its desire in the matter of carrying on the work of the Public Policy Committee. The report of the Public Policy Committee will give the information to the House of Delegates as to the amount of money it will have to carry on its work. The Council, however, has been privileged to see the report to be made by this committee and concurs in its recommendations.

Executive Office

The Council again urges all members of the Association when in Oklahoma City to make an effort to stop at the Executive Offices, 210 Plaza Court for a visit. It is believed many members will then have a better understanding of its activities.

Your Council recognizes that with the expanded program of the Association there has become an increasing need for a field secretary to keep in closer touch with the County Societies and the membership. To meet this need the Executive Office is being reorganized and there will hereafter be a field secretary to accomplish this phase of the program.

Many Delegates are already acquainted with the renewed activities of the Woman's Auxiliary and the expansion in this field has placed an additional work load on the Executive Office, however, your Council is firmly of the opinion that no finer or necessary activity could be developed than this encouragement given the Auxiliary.

Your Council would point out to each of you that few of us realize the extent to which the Executive Office is carrying a work load. A few of its activities might serve as a reminder. Central working point for all committees; administration of programs such as the postgraduate program; Veterans Medical Care; Malpractice Insurance, publication of the Journal, Newsletter for both the membership and the Auxiliary, Radio and Newspaper program, Annual Meeting and all initial legislative and public relations contacts with interested persons and organizations. While your Council does not feel that the Executive Office cannot carry this volume of activities, it does nevertheless realize that there is a limit to which effective work is possible without expanding both the office and its personnel. The Council has no specific recommendations to make concerning this contingency at this time.

Amendments to the Constitution and By-Laws

With any progressive organization there is a constant need for keeping its governing and operative structure abreast of the times. Constantly striving to build a more firm foundation with which to conduct its affairs. The report to be made by the Committee on Constitution and By-Laws is an attempt in this direction and the Council supports the recommendations to be made by this Committee.

Woman's Auxiliary

Your Council would like to make special mention of the Woman's Auxiliary. This organization which is as interested in the future of medicine, can and will be of great assistance in carrying out the policies to be adopted by this House of Delegates. During the past year under the able direction of its President, Mrs. Warren Mayfield, and her Committees, the Auxiliary has made great strides. The report that has been made to the Council shows that eight County Auxiliaries have been organized in the last year and plans are under way for the organization of additional units. Your Council recommends that each County Society and its individual members both collectively and individually give every assistance possible to this organizational effort.

Committee Work

Your Council desires to pay particular tribute to the committee work that has been carried on during the past year. Particularly does it want to compliment the continued work being done by the Malpractice Insurance Committee. All of us realize that we are enjoying a greater savings in our insurance premium than we are paying in dues to the Association. At the same time the work of this Committee in working out the handling of claims is of inestimable value. The Cancer, Veterans Medical Care, the Public Policy and Publicity, and many others are due special commendation. As problems present themselves, committees must function and it is in the strength of the committees that the unity and cooperation of the profession must be integrated if success is to be achieved.

Voluntary Prepaid Hospital and Medical Care Plans

Your Council recognizes that the report of the Public Policy Committee will cover many fields in which the profession is interested and in which the welfare of the people is paramount. With this realization, however, comes the desire of the Council to recognize the place

that voluntary prepaid hospital and medical care plans are playing in the everyday life of each and every person. Blue Cross and Oklahoma Physicians Service have grown out of their swaddling clothes and now stand full grown. Their success is assured. By the same token, there comes a great responsibility on the part of physicians to protect these plans from abuse. In the hands of the physician lays the expenditure of these plans' money. The physician should consider the patient first, but in all cases, not allow the convenience of these plans to affect his opinion of their utilization. If compulsory health insurance is to be forestalled in this country, these plans must succeed. The old fable of the goose and the golden egg is very applicable. Your Council also recognizes that with the coming of ideologies foreign to free enterprise, there may come a demand from the public for an expansion of the services of Oklahoma Physicians Service. Your Council would therefore recommend to Oklahoma Physicians Service that it consider making adequate surveys and plans on these subjects and to report to the Council or the House of Delegates its observations on this question at a later date.

1948-49 Program

Your Council is most keenly aware of the controversy that has arisen over the raise in dues from \$22.00 to \$42.00. It has been subjected to criticism both personally and collectively and for this reason feels that it is timely to again suggest that each Delegate who is here today should immediately recognize his individual responsibility to make a report to his County Society at its first meeting following this session. The policies of this Association for the year to come will be governed by the actions to be taken by this House of Delegates as has been true in all past sessions and the responsibilities for the dues to be paid for membership again will be the pleasure of this House. As has been previously stated, the Council will not make a recommendation concerning the dues for 1949 until this House of Delegates has made its decision as to its desire for a program for the Association in 1948-49.

Your Council recognizes that it is charged with the responsibility of recommending a program for the ensuing year and it accepts this responsibility with the full realization of the import of such recommendations.

Your Council therefore recommends that this House of Delegates reaffirm and endorse the recommendations made by the Council and endorsed by the House of Delegates in 1947 all of which have not been accomplished during the past year.

As your Council views the problems in health that affect the people and in which the medical profession must participate it has come to the conclusion there are three fundamental principles that must be understood, adhered to and achieved. They are as follows: 1. A sound, compact and progressive Oklahoma State Medical Association. 2. A statement of principle and objective. 3. A plan for the support and attainment of the principle and objectives.

Obviously, the first recommendation means a revitalization of every part of the Association from the committees through the County Societies to the Council and the House of Delegates. In order that this program may move ahead, the Council recommends the following:

1. That, at the earliest possible date, all officers of County and District Medical Societies meet on the basis of their Councilor District affiliations and determine the identity of the County and District Societies within the District. The Council, in turn, to re-charter all County or District Societies and to review their Constitution and By-Laws for the purpose of coordination with the State Constitution and By-Laws.

2. That, at the time of the Meeting, referred to above that the officers of the County Societies perfect a Councilor District Organization with a President and Secretary and that there be at least one meeting each year for a discussion of the economic and social problems facing the profession.

3. That the individual Councilors continue the meeting with the officers of their County Societies following each meeting of the Council in order to advise the Societies of the actions of the Council and to receive suggestions and recommendations from the local societies.

4. That at the fall meeting of the Officers of County Medical Societies the President will call a meeting of all standing and special committees he deems necessary to work out programs for the coming year.

The Council fully realizes that these recommendations place a great responsibility on the individual members of the Council but each member of the Council has agreed to his part of such a program and in addition the full facilities of the Executive Office will be placed at the disposal of the Councilor, the County Societies, etc.

It is the opinion of the Council that if this ground work can be consummated that this Association will then be an effective organization for the purpose of protecting the health of the people.

Statement of Principle and Objective

The Council realizes the depth and horizons that such a title could encompass and will make no attempt to outline an utopia. It does believe, however, there are certain principles and objectives that are basically fundamental to our problems in present day society.

The Council recommends as the principles those of the ten point program of the American Medical Association.

It recommends as immediate objectives the following:

1. Adequate medical care and health services for all the people.

2. An extension of public health services in the prevention of disease.

3. The establishing of a State Health Planning Board.

4. A closer liaison with the Allied Professions in accomplishing these objectives.

In discussing the first objective, your Council recognizes that adequate medical care and health services for all the people presents an age-old problem that probably in the strict sense of the word will never be solved but certainly the present situation can be improved upon. We must not be unmindful that certain segments of our federal government would like to attempt to solve this problem for the people at the tax payers' expense. As recently as May 5, President Truman reiterated his plea for compulsory health insurance. To start an attack on this problem your Council recommends the following:

1. That the University of Oklahoma School of Medicine immediately study its functions in preparing physicians for the practice of medicine and its obligation to the State of Oklahoma to investigate locally the students applying for admission insofar as possible.

2. That the University of Oklahoma School of Medicine study its policy of education as it pertains to the specialized fields versus general practice.

3. That this Association contact and consult with local communities concerning their willingness to cooperate in the locating of physicians in their areas.

4. That the State Association ask for the privilege of consulting and cooperating with the State Board of Health in the master planning for hospital construction under the Hill-Burton Bill.

5. That the Association give every assistance and impetus to the formulation of a state-wide hospital plan with the University Hospital as the parent hospital.

6. That the State Association and County Societies take a greater interest in understanding and promoting the non-profit insurance plans known as Blue Cross and Oklahoma Physicians Service which have been sponsored and endorsed by the State Association.

7. That the State Association and the County Societies through every avenue available seek to counsel with governing bodies concerning the proper handling of the indigent.

8. That wherever possible the County Societies work out local plans for handling emergency calls and the demands made upon the physician during other than his normal working hours.

9. That the State Association make an immediate survey and study as to the possibility of any physicians now practicing in the State who would be willing to relocate under desirable circumstances.

Your Council knows this is an ambitious program but by the same token believes that it is fundamental if any attack is to be made on the problem of adequate medical care for all the people.

The second objective, the extension of public health services in the prevention of disease, your Council believes to be a most important factor in medicine regaining its place in the esteem of the public. No longer can the profession assume the public to be uninformed on matters of health. All that is needed is for anyone to review present day literature coming into the average American home. Your Council makes the following recommendations in this field.

1. That the State Association and the County Societies work with the Board of Health in establishing full time county and district health units.

2. That the County Societies cooperate locally in public health programs in the schools, clubs and public and private agencies associated with the health fields.

3. That the County Medical Societies work with the public health officials or take the initiative themselves in improving general health conditions in their areas. This to include such matters as milk supplies, sewage, water supplies, etc. (One of the educational programs releases will cover this field).

Your Council is of the opinion that medicine's interest in the general health picture of the local community must be revitalized and the leadership assumed. The public is anxious to follow good sound leadership and in the field of public health and prevention of disease the profession has a tremendous source of potential public good will. At the same time lessening any demand for federal interference. The Council doubts there is any community in this State who cannot finance, support and maintain its own health needs if proper scientific advice is available.

The Council's third recommended objective is for the establishing of a State Health Planning Board. This is not a new idea originating in the Council but rather the adoption of a program that has operated successfully in other states. Your Council wonders if this House will not agree that the general public knows too little about medicine's problems. Certainly if public support is to be on medicine's side in its fight for the principles it believes right, it must not hide its light in the age-old basket. Your Council is so firmly convinced of medicine's position on principles that it believes representatives of business, labor, agriculture, the body politic, and the consuming public should be enlisted in medicine's fight for better health for all the people. Your Council recognizes that the inclusion of some groups named may seem inopportune but your Council is more

convinced that the vast majority of people will do the right thing when the truths are known that it is willing to meet across the table with all segments of our population. Your Council would like to have the approval of this House of Delegates to proceed in this field of social-economic and political planning for better health.

Your Council's last recommendation is for a closer liaison with the allied professions. Here again is an old problem that is anxious to be solved. Your Council believes that the creation of the Allied Professional Relations Committee was an excellent step in the right direction. The problem of the allied professions are the problems of the medical profession. Some of the misunderstandings are petty in their foundation and come about through lack of discussion and analysis. Your Council is of the opinion that all societies where practical, should have an occasional joint meeting with the allied professions and that all societies should have allied professional committees to be utilized in discussing and solving differences and more particularly in uniting their effort for an improvement in their own economic lives and the betterment of service to the public.

Your Council's second recommendation concerns the public relations program of the Association for the coming year, which in turn, will, to a big extent, govern the amount of dues for 1949. Your Council is fully aware that there has been criticism of the newspaper advertising campaign and by the same token there has been commendation. At the beginning of this year each member was sent a questionnaire and a report of the Public Policy Committee made to the Council and adopted by the Council. Each of you here today have again received a copy of this report. The Council is of the opinion that the Public Policy Committee is firm in its approach to the public relation problems of medicine. The Council calls to your attention that the activities of this committee have been broadened in scope and now cover the fields of newspaper, radio, awards; contests and literature; public speaking, visual education and professional relations, with the latter probably being the most significant. Your Council feels that everyone here today understands that the best possible public relations program is that of doctor-patient relationship but until the time comes that there is a complete reawakening of the physician to the art of medicine and until those with ideologies which we believe to be unsound when the health of the people is considered, have been converted, it is medicine's responsibility to the people to inform the public of the dangers that are lurking in the background. Whether this be done by radio, newspaper, public speaking or in any other way, is of little importance. The primary objective is to see that it is accomplished. Your Council has been privileged to see the report of the Public Policy Committee which will be subsequently rendered to this House of Delegates, and concurs in its recommendations.

Your Council also feels that cognizance should be taken of the situation in today's world affairs and the possibility of a third World War. Should this come about, medicine will have a tremendous responsibility. For this very real reason the Council feels that a Committee on Emergency Medical and Health Care should be appointed by the President to work with all agencies of government.

Medical Defense Fund

The Council wishes to call to the attention of the House of Delegates that during the past ten years the medical defense fund of the Association has been of little assistance to the membership. During that time only 12 physicians have applied and qualified for assistance. The fund's account now stands at \$435.18 and since any member of the Association who can qualify

can now receive coverage under the master policy of the Association held with the London and Lancashire for as little as \$26.00, the Council recommends that the medical defense fund be dispensed with and the money placed in the general fund of the Association.

The attention of this House of Delegates is also called to the fact that in the coming year there will be a national election and a session of the legislature of this state. While at this time it is not possible to foresee all of the problems that will arise, nevertheless, the profession must be alert to its responsibilities in these fields.

Your Council would also point out to the House of Delegates the importance of the Medical Research Foundation that received its original impetus in this body. The response that has been given by the medical profession has been gratifying but unfortunately in a few isolated places there has been complacency. Your Council recommends that this House of Delegates again endorse the Oklahoma Medical Research Foundation.

During the past year there have been many changes at the University of Oklahoma School of Medicine and it is the opinion of your Council that President Cross and the faculties at the Medical School are to be complimented on the aggressiveness with which they have tackled their problems. There is still much to be accomplished and the entire support of the profession should be behind the school.

In closing this report your Council realizes that many of the problems of the profession have been dealt with only lightly. There are the health programs of the State Board of Health, Cancer and Tuberculosis Societies, Veterans Administration, Public Welfare and many others. However, the Council has full confidence in the committees handling these affairs and commends them for the work that has been done. All of which has been at a sacrifice of the committee members own time and funds. Your particular attention is directed to the excellent scientific program which has been prepared. Again the program has been designed to be more general in its coverage, there being only two sections, namely medicine and surgery. It might also be of interest to this House of Delegates to know that the technical exhibitors have paid to this Association over \$4,000.00 to assist in paying the costs of the meeting. Your cooperation with these exhibitors will be appreciated.

With this report the Council now places the responsibility for medicine's progress in Oklahoma for the year 1948-49 into the hands of this House of Delegates. It shall be yours to decide whether or not this Association shall move ahead.

Budget

Revenue

Membership Dues

Dues—Fully paid members—1353	\$29,766.00
½ paid members—23	253.00
Anticipated members—30	660.00
Interest on Investments	302.00
Total	\$30,981.00

Journal

Journal Advertising 1948, \$18,129, less 15% anticipating loss	\$16,410.00
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Grand Total

Journal Budget

Printing and Mailing (includes postage)	\$ 9,500.00
Audit	75.00
Salaries	7,800.00
Postage	50.00
Engraving	500.00

Office Supplies	100.00
Press Clipping	150.00
Social Security	77.20
Stationery	50.00
Rent	625.00
Telephone & Telegraph	100.00

\$19,027.20

Revenue

\$16,410.00

Deficit

\$ 2,617.20

Executive Office Budget

Executive Secretary Salary	\$ 7,400.00
Other Office Salaries	4,800.00
Extra Help	500.00
Telephone & Telegraph	1,200.00
Postage	1,500.00
Rent	875.00
Stationery, Printing, Office Supplies	1,500.00
Travel for Executive Office Employees	900.00
A.M.A. Expense (Delegates two meetings per year)	1,200.00
Annual Secretaries Conference	250.00
Postgraduate Committee	2,000.00
Retirements	1,500.00
General Expense (Office & Employees)	1,000.00
Miscellaneous Expense (Repairs, Flowers, etc.)	250.00
Social Security Taxes	79.20
Audit & Legal Expense	225.00
Annual Meeting	1,200.00
Journal Deficit	2,617.00
Insurance (Blue Cross and O.P.S.)	126.00
Committee Expenses	1,000.00

\$30,122.20

Income from Dues

\$30,981.00

Surplus

\$ 858.80

After the reading of the Council Report, Dr. Garrison, Speaker of the House said: "It seemed wise to bring before you the Report of the Public Policy Committee before final consideration of the Council Report as a number of the recommendations of the Council Report depend on the Report of this Committee. The recommendation on dues, etc. will be held up until the Report of the Public Policy Committee." Dr. Garrison then called upon Dr. John Burton, Oklahoma City, to read the first part of the Report of the Public Policy Committee.

Dr. Burton took the floor and read the following report:

Report of Public Policy Committee

The House of Delegates will recall that the first formal attempt on the part of this Association in public relations was made in 1946, when the newspaper publicity program was inaugurated. This program has continued since that time. Proceeding the 1947 Annual Meeting the reactions of the profession were varied, but there was recognized that a group of the profession was definitely opposed to the program. At the last Annual Meeting your Committee was interested as to what action the House of Delegates would take in reference to the continuation of the program. To the Committee's very great pleasure and approval the Delegates gave almost 100% approval, and directed the continuance of the program for another year. They instructed the Council to increase the dues to accomplish this purpose. The Council then, as directed, set the dues at \$42.00 with instructions that \$20.00 of this was to be earmarked for the public relations program. With this mandate from the House of Delegates, your Committee set to



QUESTION:

When is it good practice to suggest "Change to Philip Morris Cigarettes"?

ANSWER:

When patients under treatment for throat conditions persist in smoking, many eminent nose and throat specialists suggest "Change to Philip Morris"* ... the only cigarette proved** less irritating.

● *In fact, for all smokers, it is good practice to suggest "Change to Philip Morris."*

PHILIP MORRIS

Philip Morris & Co., Ltd., Inc.

119 Fifth Avenue, New York

DO YOU SMOKE A PIPE? . . . We suggest an unusually fine new blend — COUNTRY DOCTOR PIPE MIXTURE. Made by the same process as used in the manufacture of Philip Morris Cigarettes.

*Completely documented evidence on file.

**Reprints of published papers on request:

Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154; Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60; Proc. Soc. Exp. Biol. and Med., 1934, 32-241; N. Y. State Journ. Med., Vol. 35, 6-1-25, No. 11, 590-592.

work. The Committee would remind the Delegates that the dues of \$42.00 for 1948 were not to be collected until January 1, 1948 or even after that date. It is therefore evident that the funds set up for the Public Relations program are collected almost a year later. Your Committee, knowing this, began formulating plans and projects but, realizing that the actual implementation of same would, of necessity, await funds.

As your Committee gathered data and talked with members of the profession, there was a definite crystallization of opinion that newspaper publicity alone was not sufficient to cover the public relations program of the Association. It was felt that there were many means of creating good public relations for the medical profession. About this time the State Medical Association of Colorado published a report of a survey made by Rich and Associates in reference to public relations for the medical profession in the State of Colorado. A copy of this was sent to each County Society. Your Committee gave this careful study. As a result of all the various ideas and many meetings, a definite public relations program was evolved. This program was then submitted to the Council and approved. The entire profession was circulated with copies of same. Significantly enough of more than 1350 copies mailed with a questionnaire attached, slightly more than 300 took the interest or time to reply. A copy of this report is herewith submitted: (See attached)

Today each Delegate has received a copy of this program and your Committee would appreciate your careful examination of this and use it for reference as the remainder of the report is presented.

The Committee realized that the program was quite broad in scope, but felt it was entirely feasible. To start laying the groundwork for the plan, a request was made by the Committee to each County Society to appoint a county public relations Committee. Your Committee regrets to report that only 15 counties have complied with this request.

Questionnaires were then sent both to the District Councilors and County Societies for recommendations of men to serve on this program. A subcommittee was set up for each subdivision of the plan with a member of the Public Policy Committee acting as a Chairman of each, thereby tying in the activities of the subcommittee with the parent committee. In the selection of the personnel for these committees, efforts were made to obtain one man from each Councilor District for every committee insofar as this was possible.

The committees were called together and all but one have met. They have organized, started to work, and prepared their budgets for the calendar year of 1948 as well as for 1949.

Your Public Policy Committee has been impressed with the enthusiasm and interests of the various men serving upon these committees. There are now about 70 men assigned committee memberships.

Out of these activities and with continual work going on, the Committee has had to re-evaluate the overall program. An inventory of the activities to date brings forth the following.

Newspaper Advertising

This endeavor is now into its second year of experience. The advertisements are being published in 52 dailies and 79 weeklies throughout the state with a combined circulation of 778,357 subscribers. Along with these go publicity releases upon kindred subjects that have a news value. The papers are very glad to receive these and their comments upon the material supplied have been complimentary. It is estimated that during the past year that about 800 lines of this material has been printed, and this all at no charge to the Association.

tion.

The Committee would like to call the Delegates' attention to an exhibition of the newspaper program work which has been prepared by the Erwin Wasey Advertising Agency. This exhibit is quite informative and is well worth your time. It shows the state coverage, the kind of paper and the circulation covered.

Your Committee feels that this field has been very profitable and that it has accomplished many things, not only with the reading public but in establishing better relations with the press and the editors throughout the state. Your committee feels that this program should be more elastic and adjustable in the future. It is thought that this endeavor could be made more useful in presenting ideas to the public, that arose from some immediate situations. An example being that an advertisement could be run in regard to some particular epidemic — or in regard to some acute public health condition or even advising the public in some acute emergency.

Radio

Public relations through this means has untold possibilities. Your Committee has been more than surprised at the eagerness of the doctors and the radio people for this type of program. Already there are four regular radio programs in operation, the oldest being from KOCY. This program is set up for one year, six nights a week. Three other stations, one at Tulsa, Ada and Stillwater have recently started similar programs. Many requests from other stations have been received. This reference does not include the two programs that have been sponsored for several years prior by the Tulsa and Pottawatomie County Medical Societies. Counting these two programs, there is a total of six programs now on the air. Your Committee has taken the position that it wishes good geographical distribution of the programs to start, but intends to spread out as fast as possible.

This first venture in radio is being done with recordings. The recordings are secured from the State Medical Association of Michigan, which by the way, is recognized as having one of the best radio programs. The records are made by professionals and are most excellent. They are sold to our Association at the cost amounting to \$12.00 per record. Each record has 6 programs. The sponsors pay the radio station for the radio time. It is the desire of the Committee to regulate the type of the sponsor and supervise all the copy of the programs.

Awards, Contests and Literature

Work upon division is progressing and should be ready to start in the schools at the beginning of the fall term. It is believed that the Woman's Auxiliary will be interested in assisting the Committee in promoting this phase of the program.

Public Speaking

Your Committee feels that this section offers an opportunity for excellent public relations only if well done. The subcommittee is developing this and you will be informed of this as time goes along.

The remaining divisions of the program are in the process of being developed.

With this inventory on the part of the Committee it was deemed wise to take inventory of the profession as to how they were progressing with Public Relations in the various counties.

A questionnaire was then sent to the secretaries of each County Society together with a letter to each Delegate on the same subject which reads as follows: (This letter received by all Delegates). From these statistics the Delegates can see that the individual county societies are quite limited in their efforts and certainly need assistance as well as guidance. Your committee feels that the proposed program if carried out as planned

would in a measure correct these conditions.

The Committee would furthermore call to the attention of the Delegates that this is a broad program, varied in application and involving the expenditure of almost \$30,000 needs close supervision and coordination. This means that more administrative work will be required than your Committee would be able to give. It is proposed that one of the Executive Secretaries will have to devote a large part of his time to the supervision of this program. It is estimated that he will be out of the office and traveling over the state contacting county societies, and their committees at least 75% of his time.

Your Committee in formulating the various ways and means of this program has prepared a budget of proposed expenditures of the allotted funds.

The budget is herewith presented:

Budget and Expenditures of Funds Collected for Public Relations Program	
1. Administration	\$4,200.00
Salaries	
a. Assistant Secretary	
b. Stenographic	
c. Extra Office help	\$3,000.00
Travel	600.00
Supplies	500.00
Incidental	
Telegraph — Postage	100.00
2. Budget for Radio Committee	\$1,500.00
3. Budget for Awards, Contests & Literature....	1,000.00
4. Budget for Public Speaking Com.	1,000.00
5. Budget for Assistance of Woman's Aux.	1,000.00
6. Budget for Legislative Public Relations	350.00
(Annual dinner for legislators)	
	\$9,050.00
Estimated Income	
1350 members at \$20.00	\$27,000.00
Less	9,050.00
Budget for Newspaper	\$17,950.00

Discussion of Budget

Your Committee gave this subject hard study and were convinced that for this year, the expanded program would have to stay within the allotted funds. To do this meant reapportionment of the funds. It was felt that items 1 to 6 inclusive were really "must" items and the amounts assigned were the very minimum amounts. Setting up an estimated income of \$27,000.00 and deducting the "must" items which totalled \$9,050.00, left a balance of \$17,950.000.

Secondly, it was the opinion of the Committee that it would be best to stop the newspaper advertising for the present, with the idea to revive it later and possibly in a different manner as suggested. The balance of \$17,950.00 should be ample for this and it would also serve as a backlog.

Summary

- A lengthy report has been made but it is presented to emphasize the following:
1. Good Public Relations are a necessity for the medical profession.
 2. Today Public Relations in regards to the profession as a whole can be improved.
 3. To effect this improvement demands teamwork, from the individual doctor, the county society, the Councilors, Delegates and the entire officer personnel of the Association.
 4. A good plan has been proposed.
 5. Since we are living in an era of change we must adapt ourselves to the change or else become extinct.
- Your Committee would like to make the following recommendations for your consideration:

1. That the Public Relations Program as presented be approved in principle, leaving the details to be worked out by the Committee.
2. That if approved it have the support of the entire profession.
3. That there be no increase in dues to finance the program, but that the House of Delegates approve the dues for 1949 the same as 1948 in the amount of \$42.00 which would carry the program through another year.

Following the reading of the Report, the Chair stated: "We will have discussion on this part of the report now. This is a very important report and it carries much in the way of future course of this Association. Let us have it discussed and understood and let us have a motion to dispose of it. I shall entertain comment from the floor."

Lengthy discussion from the floor followed. The Committee was commended for its Report and for its untiring efforts. Several delegates expressed their approval of the plan as set up by the Committee. Dr. Burton was asked again concerning his plan for the newspaper advertising and he explained that it was the Committee's plan to stop this advertising temporarily. The delegates from Carter County stated that they had been instructed to oppose further newspaper advertising and to oppose any raise in the dues.

At this point it was moved by W. W. Cotton, M.D., Atoka, seconded by J. T. Colwick, M.D., Durant, that the Report of the Public Policy Committee be adopted and that the additional \$20.00 fee for public relations be accepted for a total dues of \$42.00, this additional fee to allow the Public Policy Committee to continue its work.

C. M. Hodgson, M.D., Kingfisher called for a roll call vote of the House and the Speaker called upon the Tellers of Election to come forward: A roll call vote was taken and after tabulation, the following results were ascertained. 77 votes to carry the motion as stated; 3 votes not to carry the motion. The motion carried.

Following the above action the Speaker called upon McLain Rogers, M.D., Clinton for the second part of the Report of the Public Policy Committee:

Report of the Public Policy Committee
Legislation
Part I

Your Public Policy Committee, in making its report on legislation that may come before the profession for consideration in 1948-49, feels that its report should be made in two parts — one covering the situation nationally, the other from the state level.

On the National level Congress still has before it several measures which would bring the Federal Government further into the field of medical care from a treatment standpoint. Your Committee, of course, refers to the Wagner-Murray-Diungell and the Taft-Smith-Donnell Bills. The first measure calls for national compulsory health insurance, the other grants in aids to states. Certainly there must be continued opposition to National Compulsory Health Insurance. What will happen with the adjournment of this Congress must, of course, be determined later when this country has determined its national leadership in a democratic way. Your Committee would, however, call to your attention the advantages that have accrued to some communities through the workings of the Hill-Burton Hospital Construction Act wherein certain communities have been able, by Federal assistance, to provide better health facilities for themselves. While this has been of distinct assistance your Committee cannot refrain from pointing out that the National Government is over three hundred billion dollars in debt and that sooner or later local

communities must carry their own loads either from a local community or state level. Your Committee feels that particular commendation should be given to the communities in Oklahoma that have achieved these results by their own initiative. The part the Board of Health will play in this field will be of tremendous importance.

Your Committee would also call to your attention the bill being sponsored by the National Parent Teachers Association which calls for Federal assistance in giving health examinations and care to school children. This bill, while having some meritorious features is nevertheless the type of bill that has tremendous adverse possibilities. An example might be drawn of these possibilities when consideration is given to an amendment offered by the Children's Bureau to amend the bill to change its coverage from assistance to children in the school to every person of school age.

This type of change of meaning is always a possibility and points up the need for constant vigilance.

Your Committee will not take time to give a complete resume of all bills pending in Congress but will state that it will keep the County Societies advised at all times of impending dangers in National legislation.

Legislation on a state level while just as important, can be viewed with a little more practicability. Certainly there will be continued controversies with the cults and other groups that would enter the fields of the healing arts. The attitudes to be taken on these measures cannot be set months in advance of their introduction into the state legislature. However, your Committee feels that the House of Delegates must again be advised that the success or failure in all legislative programs depends upon work done at the county level.

During the past years it has been customary for your Committee to recommend any legislative proposals that have come before it and which your Committee feels should have the endorsement of the House of Delegates. Your Committee, therefore, recommends that this House of Delegates again approve legislation which will substitute the Medical Examiner for the County Coroner. This measure was introduced at the last legislature but failed of passage.

The Tulsa County Medical Society presented to the Committee at its May 6 meeting the results of a survey of its membership concerning legislation its membership felt was needed in Oklahoma. Of five proposals two are of a local nature and three have state wide interest. These three proposals were as follows:

1. An act to prohibit advertising by any practitioner of the healing arts in Oklahoma.
2. An act to require all coroners in Oklahoma to possess the degree of doctor of medicine.
3. An act to revoke the licenses of all practitioners of the healing arts who may be legally committed to a state institution for the insane.

Representing the Tulsa County Society at the meeting was Marshall O. Hart, M.D., who spoke on these proposals with further comment concerning compulsory immunization and the reporting of cancer.

The Committee called into conference Mr. Bill Harkey, Attorney for the Medical Board of Examiners, who reported that the Board had under consideration two acts concerning advertising and license revocation and inasmuch as the Association's previous stand on the Medical Examiner Bill had been a matter of record it was felt by the Committee that these three proposals by the Tulsa County Society should have co-endorsement with those of the Medical Board. Dr. Hart concurred in this stand of the Committee.

With reference to compulsory immunization and the reporting of cancer your Committee was of the opinion that consultation with the State Board of Health on

these two measures was indicated. Your Committee has contacted the Commissioner of Health and finds that at this time the following legislative proposals have been approved by the State Board of Health:

1. Enactment of the necessary legislation providing for social security for state public health employees.
2. Enactment of a law fixing minimum standards of fluid market milk, leaving to cities and towns the right to adopt maximum standards.
3. Enactment of the necessary law fixing minimum sanitation standards governing food handling establishments.
4. Enactment of a law giving the State Department of Health authority to handle situations relating to pollution and health hazards in and around lakes.
5. Enactment of necessary law making it possible for health authorities to hospitalize and if necessary quarantine open, active cases of human tuberculosis where they fail to cooperate with health authorities in the prevention of the spread of tuberculosis.
6. We are without laws governing health conditions in and around tourist camps, tourist courts, trailer camps, and public and private camping areas in this state. We feel that the necessary law should be enacted governing the above mentioned places. We further feel that the same can be done by amending the existing hotel, lodging and rooming house law.

7. We recommend for your consideration enactment of the necessary legislation making it possible to have a constitutional amendment allowing counties to levy one mill over and above the present ad valorem fifteen mill levy for county health purposes.

8. The Hospital Act should be amended so that future hospitals constructed, where same does not receive Federal financial assistance, be required to submit their plans and specifications for approval to the State Department of Health prior to the starting of construction.

9. House Bill 468, O.S., 1945, should be clarified by removing from this Act certain phrases that are now contained therein where it is primarily a function of other State Departments.

10. Some thought and consideration should be given to the construction of the necessary building or buildings to house the Health Department and its laboratories.

11. Some thought should be given and, perhaps, legislation enacted making it possible for the State Department of Health to manufacture blood plasma.

Your Committee recommends that the proposals submitted by the Tulsa County Medical Society, the Board of Examiners, and the State Board of Health be approved.

Your Committee in conclusion, would like to strongly and emphatically point your attention to a letter that was received at the Executive Office, and which has been sent to all county societies, from the Oklahoma State Osteopathic Association. (This letter was read to the House by Dr. Clinton Gallaher).

It is inconceivable to your Committee that doctors of medicine would not gladly and with high honor comply with this law. Obviously it is the duty of the Medical Board of Examiners to enforce this law and unless voluntary compliance is given it is quite possible that there may have to be embarrassing situations arise.

Your Committee wishes to thank all county societies and individuals who have given such excellent cooperation. Your Committee is well aware of its responsibilities and is fully appreciative of the fact that without your help and guidance its work will be with no avail.

The Speaker called for discussion on the Report. It was moved by Louis Ritzhaupt, M.D., Guthrie, seconded

by Gregory Stanbro, M.D., Oklahoma City, that item No. 1 "Enactment of the necessary legislation providing for social security for state public health employees" be stricken from the Report. The motion *carried* and this item was stricken from the Report.

It was *moved* by Francis Duffy, M.D., Enid, *seconded* by Bruce Hinson, M.D., Enid, that item No. 8 "The Hospital Act should be amended so that future hospitals constructed where same does not receive Federal financial assistance, be required to submit their plans and specifications for approval to the State Department of Health prior to the starting of construction" be stricken from the Report. The motion *did not carry* and item 8 remained in the Report.

After discussion and the above motions, it was *moved* by McLain Rogers, M.D., Clinton, *seconded* by Onis Hazel, M.D., Oklahoma City that the Report, with corrections made by motion, be *accepted*. The motion *carried*.

McLain Rogers, M.D., Clinton was accorded the floor by the Speaker to read Part II of the Legislative part of the Report to the Public Policy Committee. Dr. Rogers read the following:

Part II — Legislative Portion Public Policy Report

Important Features in the General Program for the School of Medicine and the University Hospitals

1. Correction of the conditions which led to a reduction of medical classes from 64 to 52 students. This will require operation of the University Hospitals at an estimated full capacity of approximately 530 beds, as compared with 434 at present. While the necessary financial arrangements for this step are now being made, we must have every possible assistance in solving the shortage of nurses which has been one of the causes of closing some beds a year or two ago. (The present administration has opened one ward of 35 beds in the last six months; money was not available for further increase in beds which cost \$3,000 annually to operate each bed.)

2. The reorganized faculty, technical and administrative staffs must be supplemented during the next fiscal year. While the governing boards have promised every assistance possible in effecting this improvement, it will be necessary to increase the operating budgets approximately 12 per cent for the school and 20 to 25 per cent for the hospitals during the coming biennium in order to procure the personnel needed.

3. The professional aspects of the hospitals will be reorganized as soon as a medical director can be appointed. (This appointment is now before the governing board for approval.) The inspectors for the Council on Medical Education have advised that the revised plan for organization and operation for the entire institution as developed by the present administration should be adopted as an official policy by the faculty and board of regents in order to avoid confusion as the result of changing deanships.

4. Other changes recommended by the above council following their inspection this spring must be effected in order to preserve a Class A rating in creditable fashion. The official report of this council has not been received to date, but it will include a considerable revision of the clinical curriculum. The administration believes that it will be able to make the necessary changes.

5. Cooperative arrangements must be made to insure the successful operation of the Oklahoma Medical Research Institute which is to be erected on the campus

area during 1949. This will include a tunnel under 13th Street for the necessary utility lines and the transfer of patients between the hospitals and the institute.

6. Immediate expansion of the school of medicine building and its facilities to accommodate medical classes of 80 to 100 students. The enlarged quarters are strictly necessary so that we will be ready to increase classes when the Veterans Hospital, a possible City-County Hospital or a suitable addition to the University Hospitals will provide us with the 800 to 1,000 beds required for this plan. The crowded condition of the present building and its library make this addition imperative now.

7. Development of organized postgraduate instruction, including: the establishment of fellowships and residencies in all of the important specialties; assistance to residency programs of private, state, and federal hospitals in Oklahoma as they may be able to qualify; short courses and symposia at the school and in certain cities throughout the state. A modest budget must be created for support of this effort.

8. A considerable increase in the accommodations for our Out-Patient Department, which is one of the most important but least equipped teaching units in our institution. It will involve an addition to and the remodeling of the old section of the main hospital.

9. Provision of a modern shop and laundry for our reorganized maintenance department. The new superintendent of buildings and grounds, who is an engineer, has a maintenance load for the seven buildings which is far beyond the possibilities of his present makeshift utilities quarters.

10. Development of a program for attracting grants for research activities, for psychiatric-neurologic teaching and clinics, and for a cancer hospital, in order to maintain a respected position in relation to modern demands. The Children's Hospital and its School for Children should be enlarged in order to accommodate rehabilitation type clinics which are being provided by state and other funds.

11. A solution must be sought to the problem of the Ardmore branch of our hospitals. This problem is at a legislative level.

12. Certain types of graduate courses for nurses should be provided in order to retain registered nurses in our employ. There has been a tendency for many nurses to resign as rapidly as we can employ others; the same situation is encountered by all large hospitals. Many more students must be attracted into the school of nursing, and when a change in this direction occurs a residential wing to the new School of Nursing Building should be ready to house these students.

13. In order to anticipate the very heavy requirements of the enlarged medical center after the Veterans Hospital is constructed (presumably it will start construction this fall), and to be of more service to hospitals throughout the state, courses should be instituted for the training of ancillary and technical hospital personnel, including medical stenographers, social service workers, record librarians, colored nurses, etc.

14. We should begin plans to promote a student union building so that the social side of student life may receive attention.

We have tried to list the more important features of the institutional program; there are many other details, and I should be happy to discuss these with representatives of the Oklahoma State Medical Association for guidance and advice.

Estimated Cost of Capital Improvements Planned for the Biennium, 1949-1951, for the University of Oklahoma School of Medicine and the University Hospitals

	<i>Construction & Equipment Estimated Cost</i>	
Addition to Medical School	\$1,150,000 to \$1,600,000	
Addition & Remodeling of Present Hosp.	560,000 to	745,000
Shops & Laundry	180,000 to	210,000
Tunnel to New Research Building ..	16,000 to	18,000
Addition to New Nurses' Home ..	415,000 to	490,000
Operational Expenses for the University of Oklahoma School of Medicine for the Fiscal Year 1949-50	480,000	
Operational Expenses for the University of Oklahoma School of Medicine for 1950-51	490,000	
Operational Expenses 1949-50 — Hospital	1,600,000	
Operational Expenses 1950-51 — Hospital	1,700,000	

Dr. Rogers stated that this part of the report had been submitted only for the advice of the House of Delegates and *moved* that the suggestions tendered in the report be *approved* in principle. The motion was *seconded* by W. W. Cotton, M.D., Atoka and *carried*.

Following this order of business Dr. Garrison stated that he would now take the Council Report item by item and ask the wishes of the House on each item. The first item to be considered was the Council's recommendation of the Report of the Public Policy Committee. The Speaker stated that this item had already received action by the House.

The next item of the Council Report to receive attention was the recommendation of the Council that the Report of the Committee on Constitution and By-Laws be accepted. The Speaker asked if the House wished to defer action on this item until that Committee reported at a later session. It was *moved* by Louis Ritzhaupt, M.D., Guthrie, *seconded* by C. W. Moore, M.D., Stillwater, that the portion of the Council Report regarding the amendments to the Constitution and By-Laws be deferred until that Committee reported and that the amendments stand on their own merit. The motion *carried*.

Item number 3, stated the Speaker, was the item stating "your Council would therefore recommend to Oklahoma Physicians Service that it consider making adequate surveys and plans on these subjects (health insurance) and to report to the Council or the House of Delegates its observations on this question at a later date. It was *moved* by Andre Carney, M.D., Tulsa, *seconded* by Finis Ewing, M.D., Muskogee, that this recommendation be *accepted*. The motion *carried*.

The Speaker then called the attention of the House to the item stating "your Council therefore recommends that this House of Delegates reaffirm and endorse the recommendations made by the Council and endorsed by the House of Delegates in 1947 all of which have not been accomplished during the past year." It was *moved* by Finis Ewing, M.D., Muskogee, *seconded* by Carl Puckett, M.D., Oklahoma City, that this recommendation be *accepted*. The motion *carried*.

"The Council recommends as the principles, those of the ten-point program of the American Medical Association" was the next item for consideration and action. It was *moved* by McLain Rogers, M.D., Clinton, *seconded* by Finis Ewing, M.D., Muskogee, that this recommendation be *accepted*. The motion *carried*.

The Speaker then called for action on the Council's recommendation of the nine points of policy to attack the problem of compulsory health insurance (see Council Report). It was *moved* by Carl Puckett, M.D., Oklahoma City, *seconded* by D. B. Ensor, M.D., Alva, that this recommendation be *accepted*. The motion *carried*.

The next recommendation requiring action was that regarding the three recommendations concerning public health services (see Council Report). It was *moved* by F. W. Boadway, M.D., Ardmore, *seconded* by Finis Ewing, M.D., Muskogee, that this recommendation be *accepted*. The motion *carried*.

The Speaker then asked for disposition of the Council's recommendation to create a Committee on Emergency Medical and Health Care to be appointed by the President. It was *moved* by Louis Ritzhaupt, M.D., Guthrie, *seconded* by Finis Ewing, M.D., Muskogee, that this recommendation be *accepted*. The motion *carried*.

The next item for action was the recommendation of the Council for the discontinuation of the Medical Defense Fund. It was *moved* by Finis Ewing, M.D., Muskogee, *seconded* by Carroll Pounders, M.D., Oklahoma City, that this recommendation be *accepted*. The motion *carried*.

The next item for action was the recommendation of the Council that the House of Delegates again endorse the Oklahoma Medical Research Foundation. It was *moved* by Onis Hazel, M.D., Oklahoma City, *seconded* by Andre Carney, M.D., Tulsa, that this recommendation be *accepted*. The motion *carried*.

Dr. Garrison then stated that he would like to know the pleasure of the House regarding the budget as submitted and recommended by the Council. It was *moved* by W. S. Larrabee, M.D., Tulsa, *seconded* by F. W. Boadway, M.D., Ardmore, this this budget as presented be *accepted*. The motion *carried*.

The Chairman then stated that he would entertain a motion regarding the disposal of the entire Council Report. It was *moved* by Finis Ewing, M.D., Muskogee, *seconded* by C. W. Arrendell, M.D., Ponca City, that the Council Report be *approved* and *accepted*. The motion *carried*.

Dr. Paul Champlin, Enid was called to the speakers stand to submit a supplement to the Council Report. Dr. Champlin read the following:

Supplement to Council Report

Your Council likewise was confronted with the proposition that has been prominently publicized in the press concerning rebates. Your Council recognizes the difficulty involved in securing a unanimity of opinion of this subject. Your Council appointed a sub-committee from the Council to meet separately to discuss this problem and this sub-committee submitted a recommendation to the Council which the Council adopted. The recommendation of the Council in this matter is as follows:

The Council of the Oklahoma State Medical Association recommends to the House of Delegates reaffirmation of the policy of the American Medical Association as it was adopted by the House of Delegates of the American Medical Association in June, 1947 which follows: "Whereas the American Medical Association through its House of Delegates has officially condemned all rebate practices in whatever shape or form they may exist and has distinctly expressed the opinion that such practices are in violation of the ethics of the American Medical Association; therefore be it resolved that the Secretary of the American Medical Association communicate this action to the various county medical societies forming the constituent associations and advise them again that members accepting rebates are violating our principles of medical ethics and recommend that

each component society take appropriate action wherever this situation exists."

The Council wishes further to call to the attention of the House of Delegates Chapter II, Section 3 (c) of our own Constitution and By-Laws which states, "A component society may censure, suspend or expel any member for any cause set out in the Constitution and By-Laws of said society or for any cause deemed sufficient at law for disciplinary action."

The Council further wishes to recommend that the action of the House of Delegates relative to this matter be submitted as a special communication to the secretary of each component society of the Oklahoma State Medical Association with the request that it be presented to the membership at the first succeeding meeting following the approval of the House of Delegates of the Oklahoma State Medical Association.

Following the reading of this Supplement to the Council Report, it was *moved* by Finis Ewing, M.D., Muskogee, *seconded* by F. Keith Oehschlager, M.D., Yale, that the supplement be *accepted*. The motion *carried*.

Dr. Champlin was again accorded the floor by the Speaker and stated that he would like to present another Supplement to the Council Report. He presented the following:

Supplement to Council Report

Your Council had brought before it the problem of the individual Councilors and Vice-Councilors properly serving their Districts, to go with certain inequalities to the number of physicians in the various Councilor Districts and the distances from one corner of a given district to the other. Your Council, after careful consideration of this program, recommends that the President appoint a Committee to study the feasibility of redistricting the State after contact is made with the County Societies and said Committee to report back to this House of Delegates in 1949.

It was *moved* by Dr. Champlin, *seconded* by Dr. Ewing that the above supplement regarding redistricting be *approved*. The motion *carried*.

The Chairman then called for a report of the Committee on the Revision of the Constitution and By-Laws. Louis H. Ritzhaupt, M.D., Guthrie, Chairman, gave a brief resume of the amendments that would be presented for action at the second session. It was *moved* by Dr.

Ritzhaupt, *seconded* by Onis Hazel, M.D., Oklahoma City that the proposed amendments to the Constitution and By Laws be *approved* for presentation at the second session of the House. The motion *carried*.

At this time the Speaker asked Dr. Champlin to read the list of officers to be elected at the second session of the House. The Speaker stated that the election would take place at approximately 10:30 P.M. Dr. Champlin read the following offices to be filled: President-Elect; Vice-President; Speaker of House; Vice-Speaker of House; Delegate to A.M.A.; two Alternate Delegates to A.M.A.; Councilor District 1 to fill Dr. O. E. Templin's place, Dr. Templin having resigned and Dr. Ensor appointed; Councilor and Vice-Councilor, District 2; Councilor and Vice-Councilor, District 5; Vice-Councilor District 6, occasioned by death of Ralph W. Rucker, M.D.; Councilor and Vice-Councilor, District 8. Dr. Champlin explained the importance of filling these offices and asked that the Delegates give the matter serious consideration.

The Speaker recognized Dr. C. E. Northcutt, President-Elect who informed the House that Dr. V. C. Tisdal, Elk City, Past President, was in a very critical condition at the University Hospital.

Dr. Northcutt expressed his earnest desire to fill his position as President in an efficient and progressive manner and asked the help and support of the House. He assured those present that he would do his best.

At this time the Speaker said that he would entertain a motion for adjournment for recess in order that the members may attend the buffet dinner to be given by the Oklahoma County Medical Society. It was so *moved* by W. S. Larrabee, M.D., Tulsa, *seconded* by Finis Ewing, M.D., Muskogee, and *carried*.

The time for the reconvening of the House was set at 8 P.M. by the Speaker.

(Continued in August Issue)

Following the scientific paper presented at the annual meeting of the Oklahoma State Medical Association by Franklin H. Top, M.D., Detroit, in which he blamed laxity in food handling for poisonings, a food handlers school was held in Woodward sponsored by the chamber of commerce, the State Department of Health and State Board of Vocational Education.

William F. LaFon, M.D., Alva, was guest speaker at the regular meeting of the Horace Manu P.T.A. in Alva recently. He spoke on the importance of immunization.

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OFFICERS OF COUNTY SOCIETIES, 1948

COUNTY	PRESIDENT	SECRETARY	MEETING TIME
Alfalfa.....	L. T. Lancaster, Cherokee	C. E. Cook, Cherokee	Last Tues. each Second Month
Atoka-Bryan-Coal- Johnston.....	Charles D. Dale, Atoka	A. T. Baker, Durant	Second Tuesday
Beckham.....	T. J. McGrath, Sayre	J. B. McGolrick, Erick	Third Thursday
Blaine.....	Fred Perry, Okeene	Virginia Curtin, Watonga	Third Thursday
Caddo.....	Joseph Henke, Hydro	Edward T. Cook, Jr., Anadarko	Subject to Call
Canadian.....	J. N. Goldberger, El Reno	Jack W. Myers, El Reno	Second Tuesday
Carter.....	C. D. Cunningham, Ardmore	Roger Reid, Ardmore	First Tuesday
Cherokee.....	P. H. Medearis, Tahlequah	R. K. McIntosh, Jr., Tahlequah	
Choctaw-McCurtain- Pushmataha.....		Fred D. Switzer, Hugo	Fourth Thursday
Cleveland.....	Phil Haddock, Norman	James F. Hohl, Norman	Second Tuesday
Comanche.....	Byron W. Aycock, Lawton	E. Stanley Berger, Lawton	Third Friday
Cotton.....	G. W. Baker, Walters	Mollie Scism, Walters	
Craig.....	C. P. Chum'ey, Vinita	J. M. McMillan, Vinita	Second Tuesday
Creek.....	P. K. Lewis, Sapulpa	Louis A. Martin, Sapulpa	Third Thursday
Custer.....	J. G. Wood, Weatherford	Edgar A. deMeules, Clinton	Fourth Thursday
Garfield.....	J. Wendell Mercer, Enid	Roscoe C. Baker, Enid	Wed. before 3rd Thur.
Garvin.....	Carl Steen, Pauls Valley	John R. Callaway, Pauls Valley	
Grant.....	I. V. Hardy, Medford	F. P. Robinson, Pond Creek	
Grady.....	L. E. Woods, Chickasha	Wesley W. Davis, Chickasha	
Greer.....	Fred Sellers, Mangum	J. B. Hollis, Mangum	First Wednesday
Harmon.....	R. H. Lynch, Hollis	C. N. Talley, Hollis	
Haskell.....	William S. Carson, Keota	N. K. William, McCurtain	First Friday
Hughes.....	L. A. S. Johnston, Holdenville	Paul Kernek, Holdenville	Last Monday
Jackson.....	J. M. Allgood, Altus	J. Harold Abernathy, Altus	Second Monday
Jefferson.....	H. A. Rosier, Waurika	O. J. Hagg, Waurika	Second Thursday
Kay-Noble.....	Glenn Kreger, Tonkawa	E. C. Mohler, Ponca City	
Kingfisher.....	H. Violet Sturgeon, Hennessey	Henry C. Trzaska, Hennessey	
Kiowa.....	R. F. Shriner, Hobart	J. B. Tolbert, Mt. View	
LeFlore.....	John H. Harvey, Heavener	Rush L. Wright, Poteau	First Wednesday
Lincoln.....	Jack Mileham, Chandler	C. W. Robertson, Chandler	Last Tuesday
Logan.....	E. W. Lelew, Guthrie	J. L. Lelew, Guthrie	
Mayes.....	E. H. Werling, Pryor	Paul B. Cameron, Pryor	
McClain.....	I. N. Kolb, Blanchard	W. C. McCurdy, Jr., Purcell	Third Thursday
McIntosh.....	J. Howard Baker, Jr., Eufaula	W. A. Tolleson, Eufaula	
Muskogee-Sequoyah- Wagoner.....	George L. Kaiser, Muskogee	Eugene M. Henry, Muskogee	First Tuesday
Northwestern.....	Joe L. Duer, Woodward	C. W. Tedrowe, Woodward	2nd Thurs. Even Mo.
Okfuskee.....	A. S. Melton, Okemah	M. L. Whitney, Okemah	
Oklahoma.....	W. W. Rucks, Jr., Oklahoma City	John F. Kuhn, Oklahoma City	Fourth Tuesday
Okmulgee.....	J. C. Matheney, Okmulgee	Mrs. Muriel Waller, Exec. Secty.	Second Monday
Osage.....	C. S. Stotts, Pawhuska	S. B. Leslie, Jr., Okmulgee	Third Thursday
Ottawa.....	F. L. Wormington, Miami	William A. Loy, Pawhuska	Second Thursday
Payne-Pawnee.....	Clifford M. Bassett, Cushing	W. Jackson Sayles, Miami	Third Friday
Pittsburg.....	Homer C. Wheeler, McAlester	C. W. Moore, Stillwater	First Wednesday
Pontotoc-Murray.....	W. T. Gill, Ada	Edward D. Greenberger, McAlester	1st and 3rd Saturday
Pottawatomie.....	Jack W. Baxter, Shawnee	Ollie McBride, Ada	
Rogers.....	P. S. Anderson, Claremore	F. C. Gallaher, Shawnee	
Seminole.....	Claude Chambers, Seminole	M. E. Gordon, Claremore	Third Wednesday
Stephens.....	Fred Patterson, Duncan	Mack I. Shanholtz, Wewoka	Third Wednesday
Texas.....	Daniel S. Lee, Guymon	W. R. Cheatwood, Duncan	
Tillman.....	G. A. Tallant, Frederick	E. L. Buford, Guymon	Second and Fourth Monday
Tulsa.....	Victor K. Allen, Tulsa Medical Arts Bldg.	O. G. Bacon, Frederick	
Washington Nowata.....	L. B. Word, Bartlesville	John G. Matt, Tulsa	Second Wednesday
Washita.....	A. H. Bungardt, Cordell	Mr. Jack Spears, Exec. Secty.	Last Tuesday
Woods.....	R. A. Whitenack, Wynoka	C. L. Johnson, Jr., Bartlesville	Odd Months
		Aubrey E. Stowers, Sentinel	
		W. F. LaFon, Alva	

COUNCILORS AND VICE-COUNCILORS

COUNCILORS AND VICE-COUNCILORS

District No. 1: Alfalfa, Beaver, Cimarron, Dewey, Ellis, Harper, Texas, Woods, Woodward—Daniel B. Ensor, M.D., Hopeton (C) 1950; O. C. Newman, M.D., Shattuck (V-C) 1950.

District No. 2: Beckham, Custer, Greer, Harmon, Jackson, Kiowa, Roger Mills, Tillman, Washita—L. G. Livingston, M.D., Cordell (C) 1951; O. C. Standifer, M.D., Elk City (V-C) 1951.

District No. 3: Garfield, Grant, Kay, Noble, Pawnee, Payne—Bruce Hinson, M.D., Enid (C) 1949; R. W. Choice, M.D., Wakita (V-C) 1949.

District No. 4: Blaine, Canadian, Cleveland, Kingfisher, Logan, Oklahoma—Carroll Pounders, M.D., Oklahoma City (C) 1950; Joe Phelps, M.D., El Reno (V-C) 1950.

District No. 5: Caddo, Carter, Comanche, Cotton, Grady, Jefferson, Love, Stephens—J. Hobson Veazey, M.D., Ardmore (C) 1951; O. J. Hagg, M.D., Waurika (V-C) 1951.

District No. 6: Creek, Nowata, Osage, Rogers, Tulsa, Washington—Ralph McGill, M.D., Tulsa (C) 1949; P. S. Anderson, M.D., Claremore (V-C) 1951.

District No. 7: Garvin, Hughes, Lincoln, McClain, Murray, Okfuskee, Pontotoc, Pottawatomie, Seminole—Clinton Gallaher, M.D., Shawnee (C) 1950; Ned Burleson, M.D., Prague (V-C) 1950.

District No. 8: Adair, Cherokee, Craig, Delaware, Mayes, Muskogee, Okmulgee, Ottawa, Sequoyah, Wagoner—Shade Neely, M.D., Muskogee (C) 1951; W. J. Sayles, M.D., Miami (V-C) 1951.

District No. 9: Haskell, Latimer, LeFlore, McIntosh, Pittsburg—Earl Woodson, M.D., Poteau (C) 1949; E. H. Shuller, M.D., McAlester (V-C) 1949.

District No. 10: Atoka, Bryan, Choctaw, Coal, Johnston, Marshall, McCurtain, Pushmataha—W. K. Haynie, M.D., Durant (C) 1950; W. W. Cotton, M.D., Atoka (V-C) 1950.

THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

A SIXTY-FOUR DOLLAR QUESTION "WHAT TO DO AFTER SIXTY-FIVE"

One and a half centuries ago, perhaps in a jocular mood, Horace Walpole said, "about the time . . . I die the secret will be found of how to live forever." So much time having elapsed, Helen Bevington, in a number of fetching couplets sends Walpole a comforting message, which closes by adjuring him to be of good cheer, "Life is about as usual here."

While this message should satisfy all departed shades, especially if they could see what goes here, it is not quite true. Old age limping along on the "crutch of time" is gradually gaining ground. Neither Walpole nor Bevington realized that the ageing process begins with the first contact of the spermatazoa with the ovum. In modern life this relatively unknown process is merely being prolonged. Naturally the changes become more obvious as more people live longer.

Unfortunately, the old age period poses many evil potentialities and imposes penalties on all the age groups. In 1924 Thewlis wrote "In going over our best works in literature, art, poetry and the sciences, we find that we are much richer for the brains of many old men and women; and the works of men past eighty have been a mint of knowledge." But with the mounting load in this period which sets the stage for the "Last scene of all" . . . we wonder if the balance between good and evil may not be lost. Already geriatrics is being hard pressed to stave off "second childishness" and avert "mere oblivion" to say nothing of the stupendous task of finding ways and means of providing adequate care and comfort for those already "sans teeth, sans eyes, sans taste, sans everything."

For the benefit of those who may question the above cry of what may appear to be comprehensive calamity touching every phase of the human life cycle it may be said that Lous I. Dublin has put the authoritative statistical data bluntly before us. Undue alarm is useless. We must calmly pick up the ominous overtone and get on with our geriatric

program. We may rest assured that the limitations of such a program will leave many of the evil potentialities untouched. These must be met by ever increasing demands for social and economic adjustments. Editorial space will not permit an adequate discussion of the above facts and their significant implications. But a few of Dr. Dublin's figures will help to establish their plausibility and stimulate those who read to think and to further pursue this important problem.

In 1900 there were approximately 3,000,000 persons in the U. S. past 65. Today this age group approximates 9,000,000, apparently in the normal course of life in the U. S., this group will continue to increase for decades in crescendo fashion.

Under modern trends the persons between 20 and 65 must supply all the necessities of life for all the persons from birth to 20 and for all from 65 to the grave. For some time to come the youth group may be expected to maintain its present status while the old age group rapidly grows. It is well to think of the mounting burden the support group must carry.

The questionable prohibition of employment among the young group and the physical limitations of those past 65 leaves the support group without further recourse. It is interesting to note that the elimination of domestic chores by mechanistic progress and the prohibition of child labor has made college education more nearly universal. Since the youth cannot accept employment, cultivation of the mind may help to supply valuable recruits to the support group.

In the light of present socialistic trends and governmental aggrandizement, it may be well to close with these observations.

It is perfectly obvious that those who work cannot continue to support all who live if deprived of personal liberty and free enterprise. If bureaucracy and labor continue to dog industry, capital will dwindle until there will be no jobs. Sans capital and jobs there can be no production; sans production even the bureaucrats will go hungry. When the

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mills of the gods grind this grist may the true God be merciful to the aged.

If unhampered by government control the support-group can be counted on to find a way. They will look the problem squarely in the face and meet the medical, economic, social and spiritual problems of the young and the old, maintaining the vital personal relationships unknown in the course of government paternalism with its fictitious personalities.

When the aged come close to the last gasp; when existence means neither life nor death as they drag on from day to day, wrestling with the dark angel, free spontaneous patient-physician relationship becomes a treasured boon. What a challenge to geriatrics!

A PHYSICIAN'S POLL

On a three thousand mile jaunt on trains, in taxicabs, busses, street cars and subways the writer attempted, without provoking controversy, to find out what the average young man thinks about medicine. It seems fair to say that the composite opinion indicates that medical care is too difficult to obtain, too cold and impersonal, too hurried, too unsympathetic, and too costly when available. It is astonishing how few working people are satisfied with the present system of medical service.

Perhaps it is best to look the horse squarely in the mouth and try to determine what is the matter. A few case histories may be helpful.

A 30-year-old in a diner, apparently intelligent, affable and fairly well poised, opened the way for a discussion of medical care. He had been in the service and the "doctors were swell." After a time we exhibited the lure by saying "President Truman is advocating socialized medicine." He was definitely hooked and broke water repeatedly. "If Mr. Truman can bring about socialized medicine I'll vote for him nine times run the risk of being caught. All these voluntary schemes to give medical care are not worth a damn. My father had a heart attack and needed oxygen for days. The Blue Cross allowed only \$10.00 for oxygen. I once belonged to a cooperative plan. I got everything regardless of cost." He was voluble in praise of the co-ops. It would be interesting to relate all that he said but space will not permit. Suffice it to say that after some careful angling he passively yielded. Especially when the gradual deterioration in quality was pointed out and

the query, "What kind of medicine would you like your grandchildren to have?"

Case No. 2 was a young architect on an elevated train who was interested in the philosophy of Francis Bacon. He was positive that socialized medicine would be a good thing. "I can imagine great medical centers built and controlled by the government through which every individual could get good medical care regardless of his ability to pay." The writer had just said, "have you stopped to figure the cost and the resulting deterioration in quality?", when his station was called. It is to be hoped he will look into this phase of the question. Certainly he is sufficiently intelligent to find the error of his way if he diligently seeks the truth.

Case No. 3 was a robust taxi driver in Chicago. Five of us were coming in from the navy pier. Four got out at the Sherman Hotel. While on the way to the Palmer House the driver turned and said, "What is this big crowd out at the pier?" The writer said, "those people are attending the annual meeting of the American Medical Association." He grasped my arm and said, "Good, now I'll get a chance to get back some of the money they have taken away from me." After giving the several doctors he had employed, or tried to employ, hell fire and damnation, apparently with some reason, he was somewhat mollified. The writer presented the cause of medicine with all the appeal he could muster and ended by saying, "You must have been unfortunate in the choice of your doctors. Let's hope for better luck." As we drew up at the Palmer House the writer expected to be hooked, but when he said 50 cents he was given a one dollar bill for the sake of "public relations."

In trying to place the blame it seems impossible to exonerate all the doctors. Perhaps many are blameless but many are guilty of not pursuing the proper patient-doctor relationship including the education of the patient. Unfortunately, some physicians may be charged with refusal to serve and others for exorbitant fees. Physician heal thyself.

"The best armour of old age is an early life well spent in the practice and exercise of virtuous deeds. For when you are advanced in years your previous good actions bring a great reward, seeing that your habits of virtue still abide with you even in extreme old age. Moreover, the consciousness of a well-spent life and the memory of many kind actions is in itself a very sweet consolation."—Cicero.

SCIENTIFIC ARTICLES

GYNECOLOGIC ASPECTS OF GERIATRICS*

GERALD ROGERS, M.D. F.A.C.S.

OKLAHOMA CITY, OKLAHOMA

It is little wonder that our predecessors wrote but little regarding gynecologic problems in elderly women. In 1890 the average span of life for a woman was 35 years. By 1930, this average life span had increased to 62.8 years, which represents an increase of 27.8 years in a 40 year period. In 1946, the fiscal report revealed the average life of American women to be 64.2 per cent, which represents an increase of over 50 per cent since the first report. Approximately eight per cent of our population are 60 years and older and slightly more than half are females which may be a modern explanation for the old adage "that woman always gets the last word."

In which period of life can it be said that old age begins for woman? We must consider the starting point of old age the period in which the first ovarian endocrine insufficiencies manifest themselves, characterizing the menopause. Much has been written concerning the management of the latter syndrome and all modern physicians are familiar with its variety of symptoms and their management. It is the purpose of this paper to offer a brief discussion of the more common gynecologic problems which have been seen concerning the management of patients 60 years and older. Post-menopausal bleeding, genital prolapse, pyuria, and tumors constitute over 80 per cent of these problems. The psychologic management of this group of patients is most important and at times difficult. Women of this age notably are shy, modest and timid. It is their habit to stay away from a physician as long as possible, preferring not to submit to genital examination and frequently do so only because of fear of cancer or upon insistence of relatives.

GENERAL CONSIDERATIONS. It is necessary to better understand the symptomatology of this group of patients that one has an accurate knowledge of the normal

physiology and anatomy associated with this chronologic period. In elderly women organs and tissues have undergone physiological involution, and atrophy is the normal phase. Notably when ovarian secretion is eliminated, either by the climacteric or by surgical removal of the ovaries, actual senescence occurs in the tissues of the vulva, vagina, uterus, and mammary gland.

The tissues become thin and inelastic, and they have a diminished blood supply. Much of the subcutaneous fat has been lost. Susceptibility to trauma and infection is a characteristic feature. Jones¹ has rightly emphasized that atrophic organs rarely become pathologic; but when they do, the object is to restore them to a *normal atrophic state* and not to a physiologic state of reproduction.

Irregularities of bleeding from the genital tract are of importance during the entire life of woman and are of special significance about the time of and after the menopause.

From the age of puberty on, to bleed or not to bleed is the question about which centers many of the ills of womankind. An index health; a frequent symptom of disease, bleeding from the female generative tract presents a problem, the accurate solution of which is of vital importance to her health and happiness. During the menopause and after its establishment, this symptom is of special significance.

Post menopausal bleeding was the chief complaint in 48 per cent of our patients. Clinically, from a diagnostic standpoint, we may consider these patients as falling in one of four groups:

1. Diagnosis readily made by inspection at the external genitalia, vagina, or cervix.
2. The diagnosis can be established by histologic study of endocervix and endometrium.
3. Diagnosis established by palpation of uterine neoplasm or adnexal pathology.

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association, May 18, 1948.

4. Cases in which bimanual examination, histologic studies, etc., fail to give satisfactory explanation for bleeding.

This last group of patients is most interesting. Repeated diagnostic curettage at three month intervals is strongly advised.

Functional Bleeding. The responsibility in expectantly treating cases of this type is heavy. Some physicians have sought to avoid this responsibility by doing a hysterectomy on all patients with unexplained uterine bleeding. This position is to be condemned! Most of these patients are old; many have some form of cardio-vascular degeneration or hypertension; and most of them are none too good operative risks. The treatment in the absence of malignant change should be conservative.

Post Menopausal Bleeding Due to Benign Lesions. Bleeding in the post-menopausal patient is due to benign causes in about 40 per cent of cases and in the majority the lesion will be found in the vagina or cervix. Following castration or natural menopause there is a gradual atrophy of the entire genital tract. The previously well developed epithelium of the vagina and vaginal portion of the cervix becomes thin, changing from the usual 25-50 cell layer thickness to half this number. The rugae becomes smooth. The mucosa changes from its dull, pink color to a reddish hue as a result of the closer proximity of the blood vessels lying beneath. This thin membrane is easily subject to abrasion which may serve as a portal of entry for the ever present vaginal flora. The cells as a result of estrin deficiency lose their high glycogen content responsible for the acid reaction of the vagina since puberty. This resultant alkaline medium and less resistant mucosa predisposes to the common condition of senile vaginitis and cervicitis so ably described by Davis and Adair.² The usual existing vaginal flora assumes a pathogenic role, although foreign specific offenders may be found.

In the early stages of senile vaginitis there is a diffuse inflammation with small superficial ulcers scattered over the walls. Bleeding may occur usually after trauma from coitus, douche or digital examination. Not infrequently in older women, in whom intercourse is rare, adhesions may form between the abraded, collapsed vaginal walls. This condition if allowed to continue untreated may progress to almost complete atresia of the vagina. Above such an obstruction may be found an hematometra or pyometra. One should never be satisfied that senile vaginitis

is the source of bleeding until all other possible causes are eliminated, particularly malignancy of the cervix, corpus, and adnexa.

Treatment. (Senile vaginitis.) To correct such deformities dilatation is done, occasionally under anesthesia, preceded and followed by estrogenic hormone therapy. Further efforts to restore a normal vaginal flora by carbohydrate suppositories and acid douches. Antiseptics have little place except in presence of specific infection with bacteria or fungae. Protozoal infections disappear with restoration of normal flora and vaginal Ph. Simpson and Mason³ have for several years successfully treated these patients with Vitamin A. We use a combination therapy.

Trophic Ulcers of Cervix and Vagina. Bleeding in some instances was found to be due to trophic ulcers associated with prolapse of the cervix and vagina. These yield promptly to treatment. When they fail to respond readily malignancy must be suspected and biopsy is imperative.

Benign Cervical Polyps and Erosions. Cervical polypae were the responsible factors in a few cases. Such polyps are no respecter of age. They invariably become infected and often ulcerate. All polyps should be removed and biopsied, but the incidence of malignancy is extremely rare. They are a frequent site of an epithelial metaplasia producing cancer-like lesions. Te Linde⁴ has emphasized that their greatest importance lies in the necessity of their recognition as benign lesions and thus preventing radical measures of surgery or irradiation.

Endometrial Polypae. Endometrial polypae are occasionally seen and may be a cause for bleeding. Diagnostic curettage may establish the diagnosis and stop the bleeding. Small endometrial polyps may not be recognizable in the curettings.

Stenosis of the Cervix. Stenosis of the Cervix resultant from atrophy or injudicious therapeutic procedures for cervical disease may excite bleeding. Obstructions from a polyp or a neoplastic nodule may create the same picture. Interference with drainage results in infection which frequently ascends.

Endometritis. Interference with cervical drainage may exist for years without producing symptoms but in many cases a pyometra results from infection of the post-menopausal secretion of endometrial glands. When the intra-uterine pressure reaches a certain point endocervical adhesions rupture or ulcerate with a discharge of blood and pus. Such adhesions may re-form with cessation

of discharge, only to recur at a later date.

Uterine Fibroids. It is well known that myomas of the uterus regress after Roentgen castration and the natural menopause. However, in a few cases they may be the only demonstrable source of bleeding, especially if there are submucous nodules present in which infection and necrosis are apt to occur. Extruded fibroids have been a common occurrence on our service and when degenerating may be confused with malignancy of cervix or corpus uteri. They are usually infected and frequently associated with pyometra. Never perform an immediate hysterectomy. The wiser course is myomectomy, drainage, and hysterectomy later.

From a clinical standpoint the important thing to remember in the patient who comes in because of post-menopausal bleeding, in whom fibroids are found, is that one has no right to assume the fibroids are the sole cause of bleeding, and defer a complete investigation. Frequently fibroids are only incidental and malignancy may be associated.

Ovarian Tumors, Benign. Bleeding was the initial symptom in approximately 40 per cent of our cases of ovarian tumor, comprising both benign cysts and solid tumors. When they occur after the age of 40, the incidence of malignancy is high. The mechanism by which these tumors produce bleeding after the menopause is not well explained since the benign tumors have no definite hormonal effect. Difficulty is frequently experienced in making an accurate pre-operative, and occasionally operative diagnosis in reference to possible malignancy. Multiple sections in the same specimen often reveal typical benign tissue with a minute area that is malignant. We employ the following simple rule: "Every tumor of the ovary with papillomatous growth (surface papilloma) on the outer surface is to be regarded as a malignant tumor, irrespective of its histologic characteristics."

Post-Menopausal Bleeding Resultant from Malignancy. Post-menopausal bleeding resulted from cancer in slightly over half our cases. The important subject of malignancy includes so many details that this discussion must be limited to a brief summary of the causes. The symptoms of bleeding when produced by a malignancy, usually herald an advanced lesion. Our chief efforts must be made toward early recognition. Brawner⁵ and others have estimated that post-menopausal bleeding is due to malignancy in three out of five cases. Carcinoma of the cervix was the most common lesion, in our cases. One must

ever be on the alert for the inverting type of lesion which may be advanced before any gross change is apparent on speculum examination. The judicious use of biopsy and curette will save many lives as well as embarrassment for the medical attendant.

Carcinoma of the corpus accounts for approximately six per cent of our uterine malignancy. Malignancy of endometrium associated with fibroids and sarcomatous changes likewise are very rare.

Malignancy of the ovary has been mentioned. It is impossible many times, even at operation and in the rare case under the microscope to differentiate between the malignant and benign ovarian neoplasm.

One type of ovarian tumor deserves special consideration in the post-menopausal patient, namely the so-called Granulosa-cell tumor. This interesting tumor produces the estrogenic hormone in large quantities, producing a true hyperplasia of the endometrium, which is "Swiss cheese" in pattern. Breasts enlarge and regain normal tone. The vaginal membrane is restored to its normal mature functioning type. Bleeding is usually cyclic in character. This tumor is relatively of low grade malignancy but studies of 36 cases by Novak and Brawner⁵ revealed clinical evidence of malignancy in 28 per cent. A tumor no larger than a pea is capable of producing hormonal effect.

Post-menopausal endometrial hyperplasia is of especial interest. The occurrence of endometrial hyperplasia is confined to the years of active menstrual life. This age incidence supports the present day conception of the condition which regards the underlying cause as disturbed ovarian function.

Meyer⁶ and Shroeder⁷ independently came to the conclusion that the cause of hyperplasia of the endometrium is an absence of the influence exerted by the corpus luteum and a persistence of the follicular or estrogenic factor. Their conclusions are based on the demonstration in most cases of an absence of corpora lutea, and an abundance of cystic follicles. The appearance of an endometrial hyperplasia after the menopause presupposes the presence of actively functioning follicle in the ovary.

The persistence of an ovarian follicle may bring about hyperplasia with bleeding as late as two years after the menopause. The possibility of a granulosa cell tumor must ever be kept in mind in such cases. If biopsy reveals hyperplasia several years after menopause, a granulosa cell or a Brenner tumor is probable, and the patient should be kept

under close observation, and subjected to laparotomy as soon as palpation shows enlargement of the ovary. Microscopic appearance of vaginal membrane and study of vaginal smears offers further criteria for evaluation.

Prolapsus Uteri. Prolapse is due primarily to relaxation and stretching of the parametrial connective tissues which are attached to the supra vaginal portion of the cervix. From this point connective tissue and musculo fascial sheaths spread outward to the bony pelvic wall as the pubo-cervical fascia, the parametrial fascia or cardinal ligaments, and as the utero-sacral ligaments. Prolapse cannot occur when the parametrial fascias or holding structures are tense and have not lost their tone. Loss of elasticity and injury to the pelvic floor are secondary factors. In the elderly patient prolapse is the result usually of a combination of injury or relaxation to holding structures and the pelvic floor support.

Suitable operations for relief of prolapse are vaginal hysterectomy, interposition operation, parametrial fixation procedures and colpocleisis. Time does not permit a description of these well known procedures. Vaginal hysterectomy is most often the procedure of choice in complete prolapse if the patient is a good operative risk, especially if the uterus is diseased. However, anatomically it is not the best since it removes the upper cervical segment and its cardinal ligament attachments, which offer the best support to the vaginal vault. Post-operative enterocele can occur.

The interposition is most useful in the group with cystocele and mild prolapse. The fundus must be of suitable size to fit under the pubic arch and the presence of fundal disease must be eliminated by preliminary curettage. The interposition procedure can be combined with the Manchester parametrial fixation when the cystocele is large and the prolapse marked.

The Manchester or Fothergill parametrial fixation procedure is probably best suited anatomically of all operations for prolapse. It simply shortens the relaxed cardinal ligaments by pulling them and uniting them anterior to the upper cervical segment. This elevates the uterus and vagina, pulling the cervix backward and the corpus forward. The cervix is usually amputated to remove diseased tissue and to shorten it as a leverage arm. It can be combined with the interposition operation or colpocleisis.

Colpocleisis is the least shocking procedure and is particularly useful with complete prolapse of the vagina, with or without the uterus. First described by Le Fort — it consists essentially of a folding in and closure of the vaginal canal by denuding rectangular strips of mucosa from the anterior and posterior vaginal walls and uniting the cut edges. Pelvic floor support is attained by approximating the levators high in the midline. Its selection precludes future coitus. It is easily done under local anesthesia and gives a high per cent of cure.

All of the plastic procedures described are suitable for local or regional anesthesia and should be accompanied by practically no shock.

Pyuria. Pyuria is common in elderly women. Prolapsus with cystocele and chronic cystitis resultant from residual urine are the predisposing causes. Moses⁸ found pyuria in 95 per cent of women over 65 years in hospital admissions. B-coli or one of the coccal groups was the usual organism.

Treatment consists of sediment bacteriologic stain to better select the appropriate urinary antiseptic, chemotherapeutic or antibiotic agent. Rest, diet, bladder lavage, and corrective measures to overcome residual urine are additional aids. Temporary use of a doughnut pessary helps correct anatomical deformities. Hematuria if present and persistent always warrants further urological investigation.

Tumors. The incidence of tumors is on the decline in the sixth, seventh, and eighth decades. They are usually primary and slow growing. Fibromas and lipomas are the most common benign tumors aside from asymptomatic uterine fibroids. The finding of asymptomatic ovarian tumors may tax one's best surgical judgment in the elderly patient. As a general rule all ovarian tumors in this age group should be removed if the patient's condition will permit. Epithelioma of the vulva is the most common malignant lesion in the age group. It is usually associated with leukoplakia. The labia majora and clitoris are the usual sites. Radical bilateral inguinal gland resection and vulvectomy as a second state is the treatment of choice. Radiation therapy does not suffice. Taussig⁹ reports 81.8 per cent five year cures with above procedure. Leukoplakia and true kraurosis, though not tumors, deserve consideration because of their frequent association with malignancies of the vulva and must therefore be regarded as precancerous or coexisting lesions. If they do not respond to Vitamin A

and hormone therapy these lesions are best managed by complete excision.

SUMMARY

1. Post menopausal bleeding, prolapsus uteri, pyuria and tumors are the most frequent conditions bringing older women to the gynecologist.

2. Varying degrees of atrophy are the normal physiologic anatomy of this chronologic period. Attempts by use of endocrines to correct exaggerated phases should not exceed this physiologic state of involution, and should not stimulate to a physiologic state of reproduction.

3. A discussion of the benign and malignant causes of post menopausal bleeding has been presented with their treatment.

4. A brief discussion of several curative and non-shocking surgical procedures for prolapse is described. These operations are adaptable for local and regional anesthesia.

5. Conservative therapy for pyuria without hematuria is advocated.

6. Tumors of the vulva, their treatment and relation to leukoplakia are discussed.

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HORMONE THERAPY WITH PARTICULAR REFERENCE TO THE MENOPAUSE AND METRORRHAGIA*

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It is remarkable the difference in opinion that abounds in this country in regard to the treatment of the menopause. It would seem that in this condition in which the therapy is so specific and satisfactory that there would be unanimity of opinion. On the one hand there is the school of thought, particularly among the older men, and I am thinking especially of two of the leading gynecologists in this country, in which the belief abounds that no woman needs to take estrogenic hormone for the menopause. This opinion indicates that, since mother had her menopause and grandmother had hers before, the process is a natural one and should have no treatment; nature should be allowed to take its course. These eminent authorities will agree that the patient may have a mild sedative at times but believe that the symptoms are almost entirely of psychological origin.

A second view-point is that of the "middle of the roader," led by one of the very top gynecologists of the United States and world. This method of treatment involves giving the patient hormones for very short periods of time, perhaps only for one month, in the form of an oral estrogen daily, after which it is rapidly withdrawn but may be taken

very sporadically in the future, attempting to stop it as soon as possible. This school of thought also believes that no more than 10 per cent of women need any hormone therapy in the menopause.

The third view-point is held largely by a group who may be called radical but who sincerely believe that essentially every woman should have estrogenic hormone and possibly for indefinite periods of time.

This author believes that estrogenic hormone is the greatest discovery for the comfort and health of women that has ever been made. Not only are true menopausal symptoms always prevented, or alleviated, but the sex function is prolonged with much greater comfort, due to the thick vagina that results from the estrogenic hormone, and the general appearance of the patient from the point of view of the complexion, youthful appearance and vivacity is tremendously aided by the proper use of estrogen. An intelligent Louisville matron has recently made an unusual expression regarding the estrogenic hormones. This patient had had a radical operation for extensive endometriosis eight years ago and had received testosterone propionate intermittently since that time for hot flashes. Recently since the thickening in the pelvis had receded and because of neuritis in the right leg, estrogens have been

*Presented before the General Session of the Oklahoma State Medical Association at the Annual Meeting, May 18, 1948.

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started again very cautiously. This has made an extra-ordinary change in the patient's appearance, general well-being and attitudes. She states, "Without the hormone the color is out of life, the receptiveness of people is changed; sex is made more attractive and more receptive by the hormone."

The menopause is the result of ovarian atrophy and cessation of the production of estrogenic hormone. Usually this process of cessation is a somewhat gradual one, skipping one or more menstrual periods and finally stopping completely. In this gradual cessation the hormone is slowly lowered to a complete absence. Frequently, however, the cessation is very rapid. The amount of estrogenic hormone in the body is very readily determined in a woman clinically by the appearance of the vagina. A normal amount of hormone is associated with a thick vagina, having a greyish-white, velvety appearance with prominent rugae. Vaginal washings from this vagina show a profusion of quite large, six-sided cells with very small nuclei. The vagina with partial atrophy and partial cessation of estrogenic hormone shows relatively small rugae, a thinning appearance of the vagina, and washings with a mixture of large, hexagonal cells with small nuclei and some smaller or rounded cells with larger nuclei. In complete absence of the estrogenic hormone the vagina becomes exceedingly thin and the vaginal washings show the epithelial cells to be small, round or oval with relatively large nuclei. This is the appearance of the castrate smear which indicates a complete absence of estrogenic hormone.

The prime symptom of the menopause is the hot flash. This is most characteristic and is present in practically every case. There are many other symptoms that are of less characteristic or diagnostic importance. Other symptoms include nervousness, irritability, crying spells, numbness and tingling, feeling of crawling on the skin, vague aches and pains, lack of concentration, insomnia and arthralgia. The hot flash, however, is not specific and may be of pure anxiety or psychological origin. When the hot flash occurs co-incidental with a vagina of full thickness and full estrogenic effect it is obviously not of menopausal origin but rather of psychological or psychiatric origin. Hot flashes that occur in women who are menstruating regularly are practically invariably not of menopausal origin but of psychological origin. Any benefit that they would receive from estrogens would be a psychological benefit

and usually only temporary. It is completely important that the patient complaining of menopausal symptoms have an atrophic vagina if we are to expect good results, and it is also quite important to realize that the patient who has received an adequate amount of estrogenic hormone, which has developed the vagina to a full thickness, with full estrogenic effect, and who continues to have hot flashes and other menopausal symptoms is in reality suffering from an anxiety neurosis or similar cause for the false menopausal symptoms. These specific points should simplify the diagnosis and treatment thoroughly.

Twenty years ago crude extracts of estrogens were first available. Later estrone, estriol and estradiol were available in pure or estrified forms. During the 1930's various injectible estrogens which were quite satisfactory were available. In 1940 stilbestrol and related compounds appeared in this country showing remarkable estrogenic effects from oral ingestion but which were associated with varying degrees of toxic symptoms. For the reason that toxic symptoms are present in varying percentage many have desired not to use these synthetic compounds because of the supposition that if they cause toxic effects in some people there is something wrong with the drug. In 1940 Collip prepared conjugated estrogens for the first time from the urine of the pregnant mare which are separated and purified for oral use and which have an extra-ordinary estrogenic effect, comparing weight for weight very favorably with stilbestrol. These conjugated estrogens, consisting largely of estrone sulfate, are marketed as Premarin (Ayerst, McKenna and Harrison) and Conestron (Wyeth) and are most satisfactory estrogens with no toxic effects. Other oral natural estrogens are also available, one of particular value being Natestrin (Upjohn). With these preparations the oral treatment of the menopause is most satisfactory and simple. There is no indication for any additional injectible estrogen today. The administration of estrone sulfate 1.25 mgm. daily for ten days, then every other day will produce a vagina of full thickness within ten days to two weeks and will alleviate all true menopausal symptoms in practically every case. There may be occasional exceptions.

There is one real fly in the ointment. The administration of estrogens in sufficient amounts to give a vagina of full thickness and full estrogenic effect is always associated with thickening of the endometrium and very often with bleeding from the endometrium.

When this occurs after the menopause there is always the question of co-incidental cancer of the uterus. As a rule the hormone is stopped for a week or two weeks. If the bleeding stops in five to seven days the hormone may be resumed at a lower dose level. If the bleeding continues two or three weeks curettage and microscopic examination of the endometrium are mandatory. Vaginal bleeding occurs in varying degree from none up to 100 per cent of women treated with estrogens depending upon the amount of hormone given. For this reason it is most important that the hormone level be kept low, below the bleeding level if possible. As the patients become older the hormone may be reduced to two tablets or even one tablet weekly with satisfactory results. It is a pleasure to treat the patient who has had a total hysterectomy because no concern over bleeding or stimulation of the uterus is present. The possibility of the development of cancer from estrogenic hormones is not to be overlooked. It is agreed by all concerned that there is no positive proof, at the present time, that estrogenic hormone has ever caused a malignancy in the human female. However this hormone does stimulate growth of the genital tissues. This powerful effect on the vagina, cervix, endometrium and breast cannot be overlooked.

At the present time there are two contraindications for estrogens in the menopause. One is genital cancer, including the breast. On the theory that normal genital epithelium is stimulated by estrogens, it is assumed that carcinoma cells when present may be similarly stimulated to cause earlier extension, metastasis and death of the patient. If all the carcinoma has been removed there is no evidence that another new growth may be formed. The difficulty is in knowing that any carcinoma has ever been totally removed or destroyed.

The other contra-indication is in the post-operative treatment of the patient with extensive endometriosis who has had castration. Estrogens would defeat the purpose of castration in such a case, causing further progression of the disease. This indicates the advisability of removing all the endometrial implants whenever possible. When there remains minimal endometriosis estrogens may be given cautiously, observing variations in cul-de-sac thickening. In advanced cases testosterone propionate given only as often as 25 mgm. intramuscularly once weekly and mild sedation may be used, but the results

are never as satisfactory as in the menopausal patient without endometriosis treated with estrogens.

The view in this paper advocates the wide use of estrogens in the menopause in small dosages with natural oral estrogens. The treatment is controlled by observing the gross thickness of the vagina. It is advised that every patient under treatment have breast and pelvic examinations every four months.

Metrorrhagia consists of irregular, prolonged uterine bleeding with occasional intermittent amenorrhea. This condition is caused by disturbance in the normal hormone production and effect which regulate menstruation. The condition is somewhat more common at puberty and the menopause but occurs throughout menstrual life. The vast majority of patients with metrorrhagia have anovulation, that is, the egg is not extruded from the ovary. In these cases the graffian follicle develops, secreting the estrogenic hormone which continues irregularly but ovulation does not occur nor its subsequent corpus luteum with progesterone secretion. Studies of the endometrium in cases with metrorrhagia show almost always an estrogenic type, that is the endometrium shows no evidence of secretion. When there is excessive estrogenic hormone the endometrium becomes thicker and develops a swiss cheese pattern or endometrical hyperplasia.

The treatments of metrorrhagia have been numerous and confusing. Probably the most common treatment is curettage of the uterus. This operation, removing the lining from the uterus, when done with care, may be followed in 50 to 60 per cent of the cases with excellent results. Particularly is this true if the irregularity in menstruation had been a minor one and of relatively short duration. The mechanism by which the ovary reverts to a normal cycle following curettage is not clear. The mechanical removal of the endometrium may interrupt some metabolic process of the hormones or a nervous stimulation by a reflex method may cause the ovary to revert to normal or possibly the passage of time and improvement in general health following the temporary cessation of bleeding may have some indirect bearing on the return of the ovary to normal function. However, failure of curettage is well known.

Many hormones have been suggested for the treatment of metrorrhagia. About 15 years ago the chorionic gonadotropins were introduced and became very popular. Ap-

parently this hormone may have some slight and temporary effect in controlling hemorrhage but it is generally concluded that chorionic gonadotropin is of little value in the treatment of metrorrhagia. It is obvious that progesterone would have been used in the treatment of metrorrhagia, particularly since this hormone is the one more obviously absent in cases of metrorrhagia. However the results were not satisfactory when the hormone was given once weekly or twice weekly in varying dosages. When given more closely together a temporary cessation of bleeding was followed often by profuse bleeding. The method fell into disrepute. Testosterone propionate has been used with temporary effects in controlling functional uterine bleeding. This hormone however should not be used in doses larger than 100 mgm. per month, usually divided in 25 mgm. once weekly, or any extended period of time. Up to 200 or 300 mgm. may be given in one single month if not continued with almost certain control of functional uterine bleeding temporarily. The disadvantage of growth of hair, enlargement of the clitoris, effects on the skin promoting acne, and voice changes with the larger dosages make the gynecologist very careful of the use of this hormone. In recent years large doses of estrogens, particularly stilbestrol, have been used for the treatment of metrorrhagia, apparently raising the estrogenic level in the blood stream very high. While the very temporary effects have been satisfactory, continuation of the large doses of estrogens or attempts to diminish the estrogens to a normal level have been followed in two, three, or four months with recurrence of bleeding, often more profuse than in the beginning. This method of treatment does not sound logical.

Metrorrhagia can be readily controlled, according to Albright, by the administration of five mgm. of progesterone daily for five or six days which will be followed three days later by a menstrual flow which leaves the uterus clean as though it had been curetted. This method of treatment he calls the medical curettage. It is also known somewhat in the literature as the Albright curettage. In a single paper on this subject Albright, in 1938, stated that this procedure prevented endometrial hyperplasia until such time as underlying disturbances in the ovarian cycle were corrected. He felt that the treatment did not correct, but merely takes care of one of the complications of the disease. He thought progesterone helped in restoring the normal cycle. No cases were reported by Al-

bright. He stated that the method was first suggested by J. S. L. Brown. An abstract of a paper by Brown, in 1938, in which he used five mgm. of progesterone in four injections given every other day for the treatment of metropathia hemorrhagica, stated that a therapeutic curettage should first be performed. Otherwise there was a tendency for profuse bleeding following the first course of progesterone. He treated seven cases; two for 28 and 19 periods, the remainder for shorter intervals. Bleeding, normal in amount and duration, followed each course of injections in one to four days. These doses were inadequate to produce complete progestational change. In fact, little histological change was seen. Amenorrhea, associated with endometrial hyperplasia, was followed by normal periods of bleeding after progesterone thus given.

In three papers by Zondek, et al, (1938, 1940, 1942) dealing largely with the effects of progesterone on amenorrhea, further observations are important and at least apply in part to the treatment of metrorrhagia. He found that the administration of progesterone 10 mgm. daily for five days in the postmenstrual phase of the normal cycle was followed in 60 hours by a period of apparently normal menstrual bleeding (intracyclic hemorrhage). If the progesterone was given at the moment when the patient had her own corpus luteum, bleeding either did not occur or occurred from a progestational endometrium. He felt there must necessarily be an interval between exogenous progesterone administration and endogenous hormone production. In secondary amenorrhea progesterone given 10 mgm. daily for five days (one given 20 mgm. for five days) was followed by an apparently normal menstrual flow. In primary amenorrhea no such bleeding occurred. He concluded that estrogen, though subnormal in amount, must be present for bleeding to occur after progesterone. Imperfectly proliferated endometrium responded to progesterone. Progesterone in doses of 50 to 150 mgm. did not interrupt pregnancy. He stated that bleeding after 50 mgm. of progesterone took place from a proliferative endometrium. Instead of five days the 50 mgm. may be distributed over two days only. If given in one injection no result was obtained. Zondek felt that progesterone as a therapeutic agent was particularly valuable because it had no injurious effect on the anterior lobe of the pituitary gland and because any possible carcinogenic influence was eliminated. He thought that the progesterone

dose (50 mgm. minimum) may be reduced if the estrogen level in the body was increased.

In 1943 Allen and Heckel reported the effect of progesterone in adolescent girls and young women with functional uterine bleeding. In 24 patients the administration of approximately 30 mgm. of progesterone was followed by cessation of bleeding within 10 days of the last injection. In one-third, normal cycles occurred for four months or more after therapy, whereas in another third there was a recurrence in less than four months. In the final third amenorrhea followed immediately or after two or three cycles. Treatment was given in single series intermittently. They felt that a single series acted similarly to a curettage of the uterus. They postulated that the progesterone might inhibit the estrogen to release the pituitary to more normal function, or that the sudden removal of inhibition from the temporary progesterone might be followed by greater gonadotropic function from the pituitary gland.

Jones and TeLinde (1942) studied the subject carefully in endometrial hyperplasia. First they studied the effect of curettage alone in 111 cases. Approximately half of the group over 35 years were relieved by curettage alone. Of those under 35 years, 40 per cent were relieved by curettage alone. Twenty-eight were treated with progesterone after recurrence, and only two required hysterectomy. They found that progesterone would not control the immediate hemorrhage, and that its greatest use was for preventive purposes. Generally progesterone should be given cyclically for four months. A recurrence was not prevented by progesterone. They gave five mgm. daily for 10 days the first month, then eight days, six days and four days. Follow-up was by history and not endometrial biopsy.

In the Endocrine Clinic of the University of Louisville an attempt is being made to study this subject and determine the value of progesterone in the treatment of functional uterine bleeding. Various dosages and methods of giving progesterone are under investigation. The principle of this treatment consists first of the usual cessation of bleeding following continuous absorption over two or three days of progesterone. This is followed by a period of withdrawal bleeding lasting three to seven days, after which complete cessation of bleeding occurs for a

period of several weeks. It is important to understand that withdrawal bleeding follows the cessation of therapy, otherwise the patient and physician are under the impression that the treatment is of no value and has really made the condition worse in many instances. Once the prolonged bleeding has been stopped recurrent treatment is given every 28 days in series, each in turn being followed by withdrawal bleeding which one may predict with accuracy according to the dose and type of product used.

Twenty-six patients with metrorrhagia have been treated for 85 individual cycles, not necessarily consecutive. Nineteen of these patients had endometrial biopsies taken before treatment was started and in every instance but one showed an interval non-secretory endometrium, indicating the absence of the corpus luteum and progesterone. In the first studies progesterone was given in oil, 10 mgm. daily for five days. This stopped continuous bleeding on the third or fourth day in 16 instances. After the bleeding had been stopped later recurrent treatment was given at 28 day intervals, 34 times, in each case being followed by withdrawal bleeding three to five days following the last injection of progesterone. There was one single instance in 51 series in which the bleeding did not stop but continued for several weeks. It appears that this original method is quite satisfactory for controlling bleeding according to plan.

Larger doses of progesterone have been given in 25 mgm. doses in oil daily for two days, three days and five days. In one instance continuous bleeding stopped and in nine instances recurrent withdrawal bleeding occurred according to plan with no failures. A single dose of 50 mgm. failed to give any withdrawal bleeding. A single dose of 100 mgm. was satisfactory as were three single injections for individual cycles of 125 mgm. and one single injection of 250 mgm. in oil. In all of these instances of large doses of progesterone in oil it was necessary to give multiple cc.'s of oil at one time since progesterone is soluble only to a degree of 25 mgm. per cc. No deleterious effects were encountered from the large amounts of oil or the large doses of progesterone. However, it would be greatly preferred that such large doses of oil should not be given at one time.

Progesterone in benzyl benzoate 50 mgm. per cc., which is one product in which a

larger amount than 25 mgm. per cc. may be soluble, was given to three patients, being followed by usual response in one or in two injections.

Progesterone in aqueous suspension has been used 11 times, one dose of 20 mgm. was followed by withdrawal bleeding in four instances; daily injections for two days was followed by withdrawal bleeding one time; 20 mgm. daily for three days stopped continuous bleeding three times and produced withdrawal bleeding once. Twice there was failure of response of any withdrawal bleeding. Progesterone has been suggested for use sublingually. The ingestion of progesterone in the stomach destroys the hormone but apparently it may be absorbed from the buccal mucosa in varying degree. Our observation in four cases shows good results in three and failure in one. Further studies are being made with this method.

The secretory effect of progesterone on the endometrium varies considerably. In 12 patients studied with endometrial biopsies following the injections of 10 mgm. daily for five days there appeared a normal premenstrual secretory effect in five instances while in five others there was a very slight secretory change and in two apparently no change whatever. It is evident from these and other cases in this series that the amount of secretory change in the endometrium is not related to the clinical effect.

The majority of these 26 patients are continuing under treatment, but 11 have had treatment stopped and apparently have good results. Three others had treatment stopped and had a recurrence of the metrorrhagia very shortly. The remainder are obviously

not cured as shown by endometrial biopsies and are being continued, some as long as 18 months, under treatment. It is of particular interest that in eight patients under the age of 20 excellent results have occurred.

It is to be realized that progesterone injected over a period of several days or given in large enough dose to be effective over several days or in a medium that would give slow absorption, is followed by a progesterone withdrawal bleeding, but which of itself does not produce ovulation or corpus luteum formation in the ovary. The reversion to normal with such a sequence of events, if it occurs, is spontaneous or may result from other concurrent therapy, in particular thyroid therapy, if indicated. It is believed that all patients with metrorrhagia with any degree of hypothyroidism, whether determined clinically or by laboratory methods, must have proper treatment with thyroid extract. The method of giving progesterone allows one to control the bleeding while at the same time attempting to stimulate the ovary, either by thyroid, gonadotropins or to allow the ovary to return to normal of its own accord. Further studies are indicated on progesterone. Improved methods of administering the hormone so that it will be absorbed more slowly than from oil will undoubtedly give a method in which it may be administered in one injection. The sublingual progesterone is of interest but probably will not be too satisfactory. If we realize the limitations of progesterone therapy, as outlined in this paper, it is likely that it represents the best method of controlling functional bleeding at the present time.

Table I
METRORRHAGIA
26 Cases Treated 85 Cycles

Progesterone (I.M.)		Stopped Continuous Bleeding	Withdrawal Bleeding	Failure
Mgm.	Days			
10	x5	16	34	1
25	x5	1	4	
25	x3		3	
25	x2		2	
50	x1			1
100	x1	1		
125	x1		3	
125	x2		1	

Progesterone Benzyl Benzoate (I.M.)		Stopped Continuous Bleeding	Withdrawal Bleeding	Failure
Mgm.	Days			
50	x1		1	
50	x2	2		
Progesterone Aqueous suspension (I.M.)				
20	x1		4	
20	x2		1	
20	x3	3	1	2
Progesterone Sublingual				
50	x5		1	1
30	x5		2	

THE MANAGEMENT OF OCULAR DISEASES COMMONLY SEEN IN CHILDREN*

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In order to make this essay practical, it was decided to take the common diseases occurring in children more or less in a chronological assembly of the conditions as they appear from birth.

METHOD OF EXAMINATION

The examination of the child is often times very difficult especially if they have an external disease that produces photophobia or that a fundus examination is indicated. The pupil can be readily dilated with one-quarter or one-half per cent homatropine, a small amount of some barbiturate can be given rectally, or the child can have a general anesthesia.

EXTERNAL INFECTIONS OF THE EYE FOLLOWING BIRTH

The first two conditions that you are called on after the child is first born are: (1) A conjunctivitis that occurs after the administration of silver nitrate. Recently there have been several articles printed in some of our popular magazines that have a large subscription rate condemning the use of silver nitrate or the Crede method. We were recently sent a circular from the American Society for the Prevention of Blindness requesting us to report on the number of cases of corneal ulcer produced by silver nitrate. In the 45 years of experience in our office we do not have one single case of ulceration of the cornea from silver nitrate even when the nurse picked up a bottle of 10 per cent instead of one per cent to drop in the baby's eyes. Penicillin and sulfa have been advocated to replace AgNO_3 . The usual silver nitrate reaction is more or less self-limited and cold five per cent soda bicarb packs and irrigations seem to alleviate the photophobia; do not forget to put cotton in the ear canal to prevent an otitis externa. (2) Gonorrheal conjunctivitis is practically a thing of the past. When it does occur our chemotherapy agents are very adequate.

In chronic conjunctivitis in babies, which is more or less now a rarity in this area of the country, one should look for inclusion blenorrhea. The diagnosis is made by taking scrapings of the conjunctiva and staining this material to bring out inclusion bodies. The sulfa drugs appear to be quite adequate in the treatment.

DISORDERS OF THE LACRIMAL APPARATUS

The most common condition found in disorders of the lacrimal apparatus is obstruction of the lacrimal duct as it enters the nasal cavities. The brief story of the embryology of the tear ducts is that this draining system is the last duct to become cannualized, it becomes patent from above downward. The biliary ducts, salivary ducts, etc., are open and functioning early in life. As a rule a baby does not have tears before it is a month old and the mother usually informs you that the child has a persistent tearing or discharge out of one or both eyes at about this age. To test whether the tear ducts are open any stain or dye may be used; one per cent mercurochrome is harmless and advisable, placing it in one eye for two or three days and then the fellow eye noting for any staining of the nasal mucosa or the posterior aspect of the tongue. If the stain fails to appear on either side the duct should be probed. This is a very simple procedure to the ophthalmologist and on most occasions is more painful to the parents.

Orbital abscesses or cellulitis are usually the result of a sinus infection and should be dealt with on that basis.

Most dermoids that occur at the point of embryological cleavage have to be removed surgically and should be done so by the time the child reaches the third or fourth year of life. Dermolipomas rarely require surgery.

CONGENITAL CATARACTS

Some authorities have stated that about 80 per cent of the children have some form of lens opacities. Obviously these opacities clear and completely disappear after the first year.

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*Presented before the General Session of the Oklahoma State Medical Association at the Annual Meeting, May 18, 1948.

It is advisable to anticipate the removal of the lens either by needling or lineal extraction by the time the baby reaches the ninth or tenth month of life. Certain types of nuclear or posterior polar cataracts can be adequately handled by doing an optical iridectomy or making a new pupil. It must be remembered that the macula is not fully developed histologically at birth and that a very early lens extraction is not indicated.

STRABISMUS

For the sake of brevity this is divided into three classes: (1) Those that occur in the first few weeks after birth. These cases for the most part have to have surgery as there is some anomaly of the muscular construction or function either in the form of a paralysis or a dominant over-action of one or more muscles. Where there is a true paralysis, for example, the external rectus, surgery should be delayed until the child ceases to show improvement. There is no rule of thumb that can be laid down. In the condition known as convergence fixis where both eyes have achieved the maximum deviation of 35 per cent to 45 per cent of inward rotation, these cases should be operated by the 12th to 16th month. They have excessively large internal rectus muscles and check ligaments. I might add that a simple recession of both internus results in correcting this maximum degree of squint. If these children are allowed to go to the seventh or eighth year of life or beyond before surgical procedures are instituted it requires two to three times the amount of surgery and the results are not nearly as gratifying.

(2) The average squint occurs from the second to the fourth year of life. The popular thought of the parents is that squints are usually attributed to the early diseases of childhood such as measles or whooping cough. This unfortunately is not the truth of the matter. You usually find one or both eyes are amblyopic or there are high degrees of refractive error or other neuro-muscular conditions that have played a dormant part until the child attempts to use the full capacity of his ocular motor system. It is difficult to take on a youngster with the idea of achieving any permanent or temporary improvement until the child is old enough to cooperate with the simplest exercises. In other words, we explain to the mother that she has to play a part, the doctor has to play a part and the child has to play a part in the recovery program. The parent can understand and cooperate perfectly but the child

has to reach the developmental part of their lives to learn how to use some of the simplest instruments such as the stereoscope or amblyoscope or some of the so-called major amblyoscopes to achieve the visual gains that are desired. About 75 per cent of the youngsters that have squints can be cured or at least temporarily relieved of their affliction through glasses and exercises. The remainder have to have surgery. I think that all of us should have our youngster's eyes straight and parallel preferably without the use of glasses by the time they enter first competition. By first competition I mean the first or second grade. When the deviation is over 25° surgery will be the ultimate procedure.

(3) When the child is over six or seven years of age and it is necessary to have surgery, it is your duty and a general practitioner to inquire of the ophthalmologist, "Why aren't this youngster's eyes straight by this period of life and has he or she received proper exercises before and after surgery?" When a child is permitted to go to the age of 15 or 16 without surgery you should have it definitely explained to yourself why this procedure was instituted so late in life, as development of binocular fixation and coordinated ocular movements are very difficult to be achieved because the fusion center which is a mid-brain function has to be stimulated early in life as it is hard to awaken this center to produce simultaneous macular perception after the seventh or eighth year.

LID INFECTIONS OF THE SCHOOL AGE

Phlyctenular conjunctivitis and seborrheic conjunctivitis are the most frequent causes of recurrent styes and chalazions. Usually when a child has phlyctenular conjunctivitis, or increase of lymphoid tissue of the conjunctiva, it is found that they also have this condition in the nasal pharynx: Removal of adenoids, tonsils and the correction of dietary and allergic conditions are the most common factors to be eliminated. Seborrhea of the lids, which incidentally is the most common eye infection in children and adults, for the most part is the result of dietary and hygienic factors plus allergy to various foods or lotions that have been applied. Obviously the treatment should be extended towards the alleviation of these conditions. The antihistamine drugs such as benadryl, pyribenzamine and others which are appearing daily are very useful as therapeutic vehicles.

THE USES AND ABUSES OF SPECTACLES IN CHILDREN

Briefly might I state that spectacles only perform the following functions whether in adults or children: (1) They relieve pain whether headaches, pain in the eyes, car sickness or various disturbances from muscular conditions such as hyperphoria, (2) They enable one to increase their visual acuity, for example myopia or presbyopia, or (3) They are an adjunct in the treatment of squint.

I think one should be very careful in prescribing glasses for low degree of refractive errors in children for continuous wear. A very common story that you receive from the parents is that the child has headaches. The youngster's pupils are dilated and a small refractive error is revealed. In going into the history a little deeper you might find that the child doesn't eat a proper breakfast that includes sufficient carbohydrates or sugar to get a maintenance carbohydrate balance until noon, especially if the child is very active, and that the youngster has a headache just after recess or before lunch, or in other words the carbohydrate metabolism is not kept up to meet the child's requirements; further they have a mid-afternoon headache, and that by three or four o'clock when they arrive home if they are unable to get into the ice box and get something in the form of a dessert, milk, or some other quick energy food that the headache may persist until supper time. You should inquire very closely into the dietary habits of these children. We have found through a rather critical analysis of many children that glasses actually are

non-beneficial in relieving headaches. Unless an adequate medical history is gone into and the above factors plus many others are dwelt upon to determine the various psychological and environmental habits of the child's daily routine, the actual relief of pain is not achieved. Just because a youngster has two or three diopters of myopia is not an adequate reason for shackling the individual to spectacles. Above all, if it is deemed necessary by the ophthalmologist to give them spectacles, a very keen evaluation of the above named factors must be gone into before they are told to put on glasses and wear them continuously for the rest of their life, and unfortunately in many localities this is a procedure that is resorted to.

It is known to all of us that in adults who have migraine if an accurate history is obtained that you can go back to early childhood and find that they had typical or atypical types of so-called migraine at about the time they entered first competition or the sixth or seventh year of life.

In closing might I strongly emphasize that when a pair of spectacles is prescribed and given to a child there must be a very definite reason why this young lady or gentleman should have an appliance put on their face and, further, what are the instructions that have been given as to the length of time that they should wear these said appliances or braces. It should be remembered that these children are extremely flexible in their individual tolerance, and the ability to take care of some of the deviations from normal greatly varies with each one.

CERVICAL DYSTOCIA?*

THOMAS C. POINTS, M.D.

OKLAHOMA CITY, OKLAHOMA

The purpose of this paper is not to bring forth anything new or different, but rather a review of our present day thinking concerning cervical dystocia. I place a question mark after the title of "Cervical Dystocia" because, how much of the so-called cervical dystocia is a true non-dilating cervix due to scar tissue or fibrotic reaction rather than a functional or fetal positional dystocia. The definition I like for this condition is: the failure of the cervix to dilate or to be effaced, (when there is no mechanical reason there-

of), within a reasonable time despite frequent and forceful contractions of the uterus.

The thought for many years was that the cervix was a muscular structure and that the reason for the failure of the cervix to dilate was due mainly to the fact of scar or fibrous tissue. However with the recent work of Danforth he found that the cervix is composed almost entirely of fibrous connective tissue with an average of only 15 per cent of smooth muscle and this was scattered at random throughout the cervix. The inconsistency of such a pattern makes it very

*Presented before the General Session of the Oklahoma State Medical Association at the Annual Meeting, May 18, 1948.

unlikely that the sphincter possibilities could be attributed to them. Also there was an insignificant amount of elastic fibers. Those that are present are more abundant in and around the walls of the larger blood vessels. In this report there was absolutely no difference in the structure of non-pregnant and pregnant cervix.

It appears to me that the main function of all this fibrous tissue is to hold the pregnancy in the uterus as evidenced by the fact that patients who have had cervical amputations rarely, if ever, go past the sixth month of gestation.

The question arises then — What makes the cervix dilate? The knowledge of that is very vague but there is little doubt that the estrogenic hormone which up to a few weeks before onset of labor is present almost entirely of conjugated states becomes freed, indicating important metabolic changes probably preparatory to the onset of labor. There is also some evidence that shortly before the onset of labor that there is a sudden drop in the pregnandiol level. Therefore the reason that elderly primagravida have a functional rigidity of cervix is due to its fibrous nature not having previously been stimulated by the effects of previous hormone physiology.

True, there are many cases of cervical dystocia which can be traced back to previous too deep cauterization, conization, marked infection, radium, etc., but we see a great many cases of so-called cervical dystocia in which the patient is a primagravida and has no known history of previous trauma. In checking over the records of these cases diagnosed as cervical dystocia one finds the fetus was larger than average, or was in an abnormal position, such as, posterior, transverse, brow, face or marked asynclitism. We have all seen multiparous patients with a persistent anterior lip of cervix present and a posterior position. After the head has been rotated manually by the operator with the very next pain or two the lip of the cervix has disappeared and the baby delivers normally.

Also many observers have reported cases where the cervix did not dilate because of a constriction ring which firmly fixes the baby to the body of the uterus.

The treatment for true cervical dystocia is Caesarean Section. However Douchens incision is used in rare cases. This is not to be construed that Douchens incisions are advocated but they are useful if one fails to recognize the condition early enough to do a

Caesarean Section or if it would be more expedient to do one either for mother or baby. For example unable to get into surgery for one to two hours and there are definite signs of fetal distress that should not wait to be taken care of. A great many cases that are thought to be cervical dystocia will correct themselves by conservative management such as sedation, rest and fluids for mother.

A 39-year-old colored woman; Para IV; Gravida V; who had had a normal pre-natal course and had no history of cauterization, cervical infection, or trauma, was admitted to St. Anthony Hospital with irregular pains April 14, 1948. Pelvic measurements were adequate and her last pregnancy was 13 years ago at which time she had a normal delivery of a 10 pound 5 oz. baby.

On admission B/P was 140/80. Urinalysis showed many RBC with a 1+ albuminuria. Hgb. 9.5 gms., RBC 3,300,000. Wasserman negative, Rh positive. X-ray of the pelvis showed a term fetus in the ROP position.

The head was over-riding the symphysis on admission and an unsuccessful attempt was made to direct it into the pelvis with an abdominal binder. She went into labor spontaneously at midnight April 16, 1948. Her membranes ruptured spontaneously six hours later and she continued to have strong 60 to 90 second contractions every four to five minutes for the next 24 hours. Treatment was expectant and consisted of sedation and I.V. fluids. But at the end of 30 hours of hard labor a sterile vaginal examination showed the cervix to be four cm. dilated with beginning edema of the anterior lip. The anterior fontanelle was felt just inside the cervix, indicating the position to be an ROP with a military attitude at a minus two station.

It was felt that this patient had either a cervical dystocia or a very large baby causing a cephalo-pelvic dystocia. A low cervical Caesarean Section was performed one hour later and a normal nine pound 11 oz. boy was delivered.

This patient probably did not have a cephalo-pelvic dystocia since she had had a previous normal delivery of a larger baby than the one delivered by Caesarean Section.

Whether or not she had a cervical dystocia is questionable. If the cervical dystocia was present it was very likely secondary to a malposition of the presenting part as indicated by the vaginal findings of a posterior position with marked deflexion attitude.

CLINICAL PATHOLOGIC CONFERENCE

The University of Oklahoma School of Medicine

Presented by the Departments of Pathology and Pediatrics

BELA HALPERT, M.D., AND HENRY B. STRENGE, M.D.

OKLAHOMA CITY, OKLAHOMA

DR. HALPERT: Rational treatment depends upon an accurate clinical diagnosis. An accurate clinical diagnosis cannot at times be obtained until post mortem examination is completed. In the meantime, the patient is treated symptomatically or empirically. The patient whose story we are presenting today is a good example of this situation. We have with us Dr. Strenge to present and analyze the clinical data. Dr. Strenge never saw this patient and has only the information which has been presented to you on mimeographed sheets.

PROTOCOL

Patient: D. J. S., white male, age five, admitted June 16, 1947; died June 21, 1947.

Chief Complaint: Enlargement of abdomen, pain in left side.

Present Illness: The patient was said to have been well until about two and one-half months prior to admission, at which time he developed anorexia and weakness. His physician made a diagnosis of anemia and gave a transfusion. An x-ray of the chest showed some cardiac enlargement. Three weeks prior to admission his physician made a diagnosis of aplastic anemia. The patient vomited, but only after taking pills for anemia. He has had a slight fever on one or two occasions. Stools have been black since the onset of the present illness. The patient has also complained, for the same period of time, of pain in the left side. Six weeks prior to admission ecchymotic areas appeared beneath the eyes.

Past History: The patient was born spontaneously at term. He developed normally, has had no childhood diseases, and no immunizations. He has had frequent colds, but no earache. The diet has included orange juice and cod liver oil.

Family History: The father is 26, the mother 28, both living and well. One sister is living and well. There is no history of familial or hereditary disease.

Physical Examination: On admission the patient was well developed, emaciated. His skin was hot and dry. The temperature was 98.2° F. and the pulse rate was 108. There were ecchymotic areas under the eyes. The conjunctivae were pale, as were also the mucous membranes of the nose and mouth. The right ear drum was slightly reddened. The chest was normal to auscultation and percussion. No abnormal heart sounds were heard. The abdomen was distended and the superficial venous pattern was plainly discernible. The liver was firm, tender, and was palpated below the iliac crest. The spleen extended below the iliac crest. There was a soft, non-tender mass in the right side of the scrotum. Superficial lymph nodes were palpably enlarged bilaterally. Extremities were proportionate and symmetrical, but musculature was wasted. Reflexes were intact; the knee jerks were somewhat sluggish.

Laboratory Data: On June 17, 1947, the urine was amber, clear, had a pH of 5.5, and a specific gravity of 1.020. There was no proteinuria or glycosuria. Only epithelial cells and calcium oxalate crystals were found in the sediment. On the same day the blood contained 9.5 Gm. per cent hb and the RBC's numbered 2.92/cu. mm. There was moderate anisocytosis and poikilocytosis. WBC's numbered 6,950 with 70 per cent neutrophils, 1 per cent eosinophiles, 26 percent lymphocytes and 3 per cent monocytes. The CO₂ combining power was 62 volume per cent. The albumin-globulin ratio was 4.6:1.6. A roentgenogram of the chest on June 18, 1947, revealed the heart to be of normal size, shape, and position; costophrenic angles were free. The right base showed small areas of infiltration. The left diaphragm was markedly elevated. On lateral view there was an area of increased density just beneath the sternum, probably an enlarged lymph node. Long bones showed disturbance of ossifica-

tion; at the proximal end of the left radius there were linear areas of rarefaction. Similar areas were noted in the body of the right humerus. Studies of the skull on June 20, 1947, were reported as "skull slightly enlarged particularly in transverse diameter, appears granular, particularly in the infraseellar region." Questionable defects were noted in the frontal and occipital areas.

Clinical Course: The patient received sedatives, narcotics for pain, and supportive therapy with fluids, plasma, and blood transfusions. He was seen in consultation by the department of surgery. It was felt that his condition did not justify the removal of a lymph node for biopsy. His course was steadily downhill. His respirations became more labored and his abdomen more distended. He died at 5:22 a.m. on June 21, 1947.

CLINICAL DIAGNOSIS

DR. STRENGE: Chief complaints of enlargement of the abdomen with pain in the left side are compatible with many diseases in a five year old child so that we must immediately turn to the present illness for additional information. The statement of anemia, treated by blood transfusion, suggests one possible cause of the cardiac enlargement which was reported early in the course of illness — enlargement from dilatation as an effect of hypoxia. In the present illness it was stated that a positive diagnosis of aplastic anemia was made. It may be that this conclusion was based upon a failure of the patient to improve following administration of iron and of liver. Evidence such as this is not adequate for a positive diagnosis of this sort and we would feel much more inclined to accept this diagnosis if we knew that there had been studies made of the bone marrow. Primary aplastic anemia is quite uncommon in patients of this age. Secondary aplastic anemia, from toxic injury of the bone marrow, is not apt to run such a chronic course — then too, we have no evidence for a toxic basis of the disease which was observed. Secondary aplastic anemia might also result from infiltration of the bone marrow by a variety of substances. Such a condition can follow replacement of marrow cells by neoplastic tissue and this, when sufficiently extensive, produces a pancytopenia. The statement, "six weeks prior to admission ecchymotic areas appeared beneath the eyes," is of great help in further narrowing our considerations. This complaint immediately suggests three possibilities. The first of these, I think, should be *scurvy*. This does not fit well with the story of acute onset two and one-

half months ago and marked anemia, however. We would have to look for some other disease process to cause the anemia if this hemorrhagic tendency were attributed to scurvy. The second disease to consider is *neuroblastoma*, most commonly of the adrenal. This neoplasm frequently metastasizes to the orbit and may lead to hemorrhages there, often associated with exophthalmus. Third and finally, *leukemia* may lead to ecchymoses around the orbit. The past history tells us little except that the patient had received orange juice, and this is another thing against scurvy.

The state of emaciation further suggests the possibility of a malignant neoplasm, although this could go with any serious illness. The pallor of all mucous membranes is evidence of the anemia previously described. The reddened right ear drum indicates otitis media, but this is probably incidental to the major disease process. With anemia and emaciation there is increased susceptibility to infection so that such complications are common.

The findings in the abdomen are most important. We are somewhat disappointed with the scarcity of comment here — simply a statement of abdominal distension without note as to whether or not fluid was present. The most important findings, of course, were the rather marked enlargement of the liver and of the spleen. Leukemia is a rather common cause of such changes. If this were a case of neuroblastoma of the adrenal, one would have expected an abdominal mass, separate and distinct from the liver, representing the primary neoplasm. As a rule this tumor mass is quite a bit lower in the abdomen, although it is possible to confuse it with liver if this organ is markedly enlarged. We should like very much to know whether or not the liver was nodular or smooth. If it was enlarged from metastatic neoplasm, the liver would ordinarily exhibit palpable nodules. The presence of a soft, non-tender mass in the right side of the scrotum suggests another site for a primary neoplasm. If this were an embryonal rest, or a neoplasm of the testicle, I would expect the tumor to have been hard and I would have expected some evidence of regional metastases, neither of which we have here. This may have been a hydrocele resulting from interference of lymphatic drainage in this area, or a varicocele. The statement that superficial lymph nodes were probably enlarged bilaterally is inadequate. We would like to know with certainty whether this palpable "enlargement"

is what would normally be expected in an emaciated child, or whether it actually represented an absolute increase in size — if so, how much of an increase?

A fourth disease to consider is Banti's syndrome. Outstanding characteristics of this syndrome include varicosities of the lower esophagus and stomach which frequently rupture giving hematemesis and melena. This would not explain the generalized lymphadenopathy, but it could explain the anemia, since a part of Banti's syndrome is anemia and often leukopenia due to hypersplenism.

Laboratory findings are disappointing in that the white count was within normal limits so far as quantity and type of cells were concerned. Up to this point leukemia seemed to be an excellent possibility. The diagnosis of leukemia is less likely now, but is not completely eliminated because leukemia in childhood is frequently seen in the so-called aleukemic phase. Since we have only the information obtained from a single blood count, we might reason that additional blood studies might finally have revealed positive and diagnostic changes. The medial areas of infiltration observed by x-ray in the right lung base could be the result of leukemia or of infiltration by some other neoplasm. The marked elevation of the left diaphragm probably signifies only the extreme splenomegaly. The enlarged lymph node, just beneath the sternum, does not help us.

Changes in the long bones are especially interesting. Not only are there changes in ossification, but there are linear areas of rarefaction in the radius and right humerus and skull. The questionable defects noted in the frontal and occipital areas are very pertinent now that we are considering leukemia or another malignant neoplasm. *Multiple xanthomatosis* or *lipidoses* are suggested as possibilities by this finding. These would include Hand-Schuller-Christian's syndrome, Gaucher's or Niemann-Pick's disease. Most of these conditions can be ruled out by the course of the disease. Hand-Schuller-Christian's is a chronic affair lasting years and characterized by a rather definite syndrome, often diabetes insipidus, etc. Niemann-Pick's disease on the other hand runs a very acute course, with marked splenomegaly, hepatomegaly and anemia. It is practically always fatal before the age of two. Gaucher's disease occurs in two forms. A chronic form which is somewhat comparable to Hand-Schuller-Christian's disease and an acute

form which resembles Niemann-Pick's in that it occurs during an earlier period of life than this patient presents. These diseases can only finally be separated one from the other by chemical analysis of the stored lipids. One other disease that falls into this general group, though not strictly a xanthomatosis is *Letterer-Siwe's syndrome*. It is characterized by splenomegaly, hepatomegaly, generalized lymphadenopathy, a tendency to hemorrhage and a progressive course to the point of death without profound changes in the blood count. This would fit all of the findings we have here. One thing strongly against this, however, is its extreme rarity.

The biopsy of a lymph node would have been diagnostic if this child suffered from either lymphatic leukemia or lymphosarcoma; it was not performed. A bone marrow biopsy would have been just as instructive in these conditions and perhaps more helpful since the xanthomatoses that we mentioned would also have been apparent in this tissue. Actually, little was done for the child aside from symptomatic therapy, and the child died five days after his admission to the hospital. It is questionable whether or not radiation therapy should have been tried. It might have prolonged life, although it is pretty obvious that the child was beyond any possible hope of cure.

In evaluating all these data, to make a final clinical diagnosis, I am influenced by the relative frequency of the diseases I have mentioned and believe it is most likely that this child had lymphatic leukemia. A strong point against this is the normal blood count, but remember that only a single blood count was taken. If we had had many blood counts and they had all been normal, I would not make this diagnosis.

Neuroblastoma of the adrenal should be considered as the second possibility. Splenomegaly, generalized lymphadenopathy and the absence of a tumor mass are against this. Finally, I think that Letterer-Siwe's disease must be considered as a third possibility, since it is capable of producing all of these symptoms.

CLINICAL DISCUSSION

QUESTION: The course that this child presented seems to be in keeping with the most common type of leukemia in children, i.e., acute leukemia. Is it not quite rare to observe an aleukemic phase in acute leukemias?

DR. STRENCE: I do not have statistical data at hand to answer this question specifically.

It is my opinion that a relatively normal white count at some stage in the course of the acute leukemia of childhood is not rare.

QUESTION: Enlargement of the veins of the abdomen is described under the physical findings. Is this necessarily an effect of some specific lesion which obstructs the portal venous circulation?

DR. STRENGE: No. Marked enlargement of the liver, or even ascites to a marked degree, will produce engorgement of superficial abdominal veins.

DR. HALPERT: I should like to ask Dr. Strengé if he thought this was a neuroblastoma of the adrenal, would he care to suggest upon which side the neoplasm was primary.

DR. STRENGE: The old story is that if it originates on the right side it tends to metastasize mainly to the liver, whereas if it begins on the left side it tends to metastasize primarily to the bones of the skull and the orbit, so-called Hutchinson's type. This original concept has not held up because there are too many cases which have been seen corresponding to the one at hand, in which not only was there massive metastasis to the liver, but the bones of the skull were involved as well. As a matter of fact the neoplasm frequently metastasizes to the opposite adrenal so that both are involved.

DR. HALPERT: Thank you, Dr. Strengé. I agree that we are not justified in speaking of the Hutchinson type and the Pepper type of neuroblastoma of the adrenal as though they were different entities.

ANATOMIC DIAGNOSIS

DR. HALPERT: At necropsy the child, though well proportioned, was markedly emaciated and there was wasting of all muscles. The abdomen was markedly distended, tense, and projected to a level five cm. above the level of the chest. The circumference of the chest at the level of the nipples was 50 cm., that of the abdomen at the umbilicus was 62 cm. All of this enlargement was caused by marked hepatomegaly. The liver extended 17 cm. below the costal margin in the right midclavicular line. The liver was displaced not only downward, but was displaced upward as well, elevating the domes of the diaphragm so that its size was even greater than might have been suspected from physical examination alone. It weighed 2960 gm., and this is almost exactly five times the usual weight of the liver for the age. The spleen was enlarged about two and one-half times. From its size and location I doubt that it could have been palpated upon

physical examination, but rather that a portion of the left lobe of the liver was erroneously interpreted to be spleen. There was no excess fluid in the peritoneal cavity, nor was there excess fluid in the pleural or pericardial cavities.

At necropsy we did not feel that the superficial lymph nodes were appreciably enlarged, so that here again perhaps Dr. Strengé was led astray by clinical data which were incorrect. There was no enlargement of lymph nodes in relation to thoracic or abdominal viscera with one exception, and this was at the hilus of the left kidney where several lymph nodes were considerably enlarged. At the upper pole of the left kidney there was a neoplasm eight cm. in diameter which completely replaced the left suprarenal gland and which invaded the upper pole of this kidney. The spleen was involved in a diffuse manner, as was also the pancreas and the liver. The liver was so diffusely involved that there were practically no discrete nodules. There were neoplastic nodules scattered through both lungs, especially in the posterior and dependent portions. Obviously, we were dealing with a primary neoplasm of the left suprarenal gland. Going back for a moment to the protocol, it was stated by the roentgenologist that an area of increased density just beneath the sternum was probably an enlarged lymph node. We found this to be one of the metastatic nodules within the lung proper.

Microscopically, the numerous sections taken from the neoplasm were all essentially similar. The tissue was composed almost entirely of neoplastic cells with practically no fibrous stroma. The cells were small, round or oval, and contained practically no cytoplasm. There was a very delicate fibrillar ground substance. The numerous focal areas of necrosis and hemorrhage could be explained by the fact that there was not sufficient stroma produced by the neoplasm for its own support. As the tumor outgrew the blood supply and stroma furnished by the parent tissue there resulted areas of necrosis and rupture of thin walled blood vessels.

Our final anatomic diagnosis was: Neuroblastoma of suprarenal gland, left, with extension into kidney, metastasis to regional lymph nodes, liver, lungs, spleen, pancreas and skeleton; Hydrocele, right; Accessory lobe of liver.

Considering this from the standpoint of oncology, there are three types of malignant neoplasms which are of similar cellular char-

acter, of which this is one. This type of neoplasm may arise from the retina of the eye and when it does it is called retinoblastoma. The second type of essentially similar neoplasm usually arises from the roof of the third ventricle of the brain and is called medulloblastoma. The type of neoplasm which is represented by this case arises from the medulla of the suprarenal gland and is

called neuroblastoma. These all have the same cellular origin and are derived from primitive cells at a stage early in their differentiation. These behave in an essentially similar fashion, with certain exceptions, namely that the medulloblastoma usually remains confined to the central nervous system, whereas the others give rise to distant metastases.

MEET OUR CONTRIBUTORS

Thomas Points, M.D., B.S., Oklahoma City, wrote Cervical Dystocia that appears in this issue of the Journal. Dr. Points was graduated from the University of Oklahoma School of Medicine in 1941 and before coming to Oklahoma University he also attended Central State College at Edmond. Dr. Points limits his practice to his specialty, obstetrics and gynecology. He is a member of the Oklahoma City Obstetrics and Gynecology Society and the Osler Society. He has been chairman of the Obstetrics and Gynecology section of the Oklahoma State Medical Association.

Gerald Rogers, M.D., F.A.C.S., Oklahoma City, is the author of Gynecologic Aspects of Geriatrics, scientific article appearing in the August Journal. He was graduated from the University of Oklahoma School of Medicine in 1930 and limits his practice to obstetrics and gynecology. He is a member of the Southern Medical Association, American College of Surgeons, Central Association of Obstetricians and Gynecologists and has been certified by the American Board of Obstetrics and Gynecology (1936). Before coming to Oklahoma City he had a teaching fellowship at the University of Chicago department of obstetrics and gynecology from 1932 to

1935. He served as Lt. Com., M.C., U.S.N.R. in World War II and is now assistant professor of gynecology at the University of Oklahoma School of Medicine and head of the department of obstetrics and gynecology at St. Anthony's Hospital, Oklahoma City.

Laman Gray, M.D., Louisville, Ky., has an article on Hormone Therapy With Particular Reference to Menopause and Metrorrhagia in this Journal. He was graduated from Johns Hopkins Medical School in 1932 and limits his practice to gynecology. He is a member of the Central Association of Obstetrics and Gynecology, American Society for the Study of Sterility, Kentucky Obstetrics and Gynecology Society, American Urological Association, Southeastern section, and has been certified by the American Board of Obstetrics and Gynecology.

A. W. McAlester, III, M.D., Kansas City, Mo., was one of the guest speakers at the annual meeting and presented the paper The Management of Ocular Diseases Commonly Seen in Children, which appears in this issue of the Journal. A graduate of Pennsylvania Medical School, he limits his practice to ophthalmology.

TWENTY-FIVE YEARS AGO

(Editorial Notes—Personal and General)

(Editorial Notes—Personal and General)

Dr. C. D. Dale, Caddo, has moved to Henryetta.

J. A. Morrow, M.D., has removed from Sallisaw to Durant.

Dr. and Mrs. J. T. Riley, El Reno, attended the San Francisco meeting.

Dr. H. A. Howell, Holdenville, has been appointed health officer for that city.

F. E. Rushing, M.D., has left Coalgate and located at 404 Security Building, Tulsa.

Dr. and Mrs. H. T. Ballantine, Muskogee, are spending the summer at Calhoun, Ky.

Dr. R. C. Meloy, of Claremore, has been appointed

county physician of Rogers County.

Dr. Leonard Williams, Pawhuska, is in Chicago where he will do special work for several weeks.

Dr. Lin Alexander has been appointed County Physician of Okmulgee County.

Dr. and Mrs. E. S. Lain and daughters, returned to Oklahoma City from a month's vacation on the Pacific coast.

Dr. Roscoe Walker, of Pawhuska, is spending some time at Rochester, while his family will enjoy a vacation at the nearby lakes and resorts.

Dr. W. Albert Cook, Tulsa, delegate to the A.M.A. San Francisco Meeting drew appointment as a member of the Committee on Medical Education.

President's Page

Many of us handle compensation cases for industries and insurance companies. The patient in these cases is entitled to the best of care. He must be treated promptly and put back to work as soon as his condition permits. When the time comes for setting the fees, a fair charge should be made considering that payment in cash is certain. Most companies will pay the fees charged without question. There are some few companies — and these are the ones which interfere with free practice — who direct the patient to a doctor who will bid low fees for that type of work.

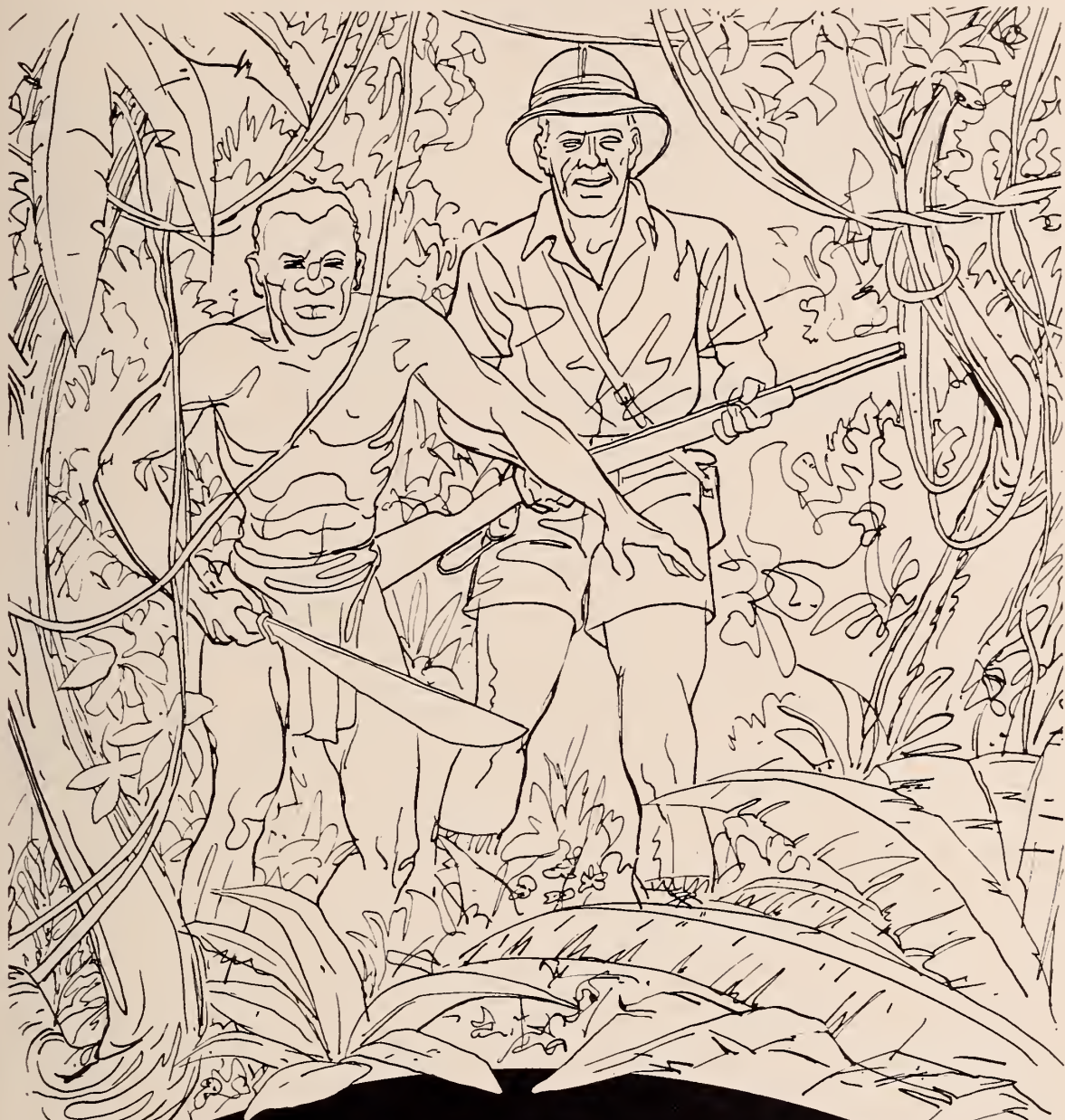
While discussing fees, it seems to me that medical bills are a small percentage of the total bills paid on lost time compensation cases. If a doctor by skillful work cuts down on a patient's disability, these services should be paid for with a 1948 dollar. An adequate fee for 1932 is decidedly inadequate today. Our insurance friends must understand that our costs are double what they used to be and our charges must go up if we are to remain in medical practice.

One more item along this line — all of us examine for life insurance companies. These examinations lead to many fine patients for us and we should be appreciative. The companies need many details now which they did not require years ago, and the scale of fee for examination needs revising to meet present day costs.

I believe our State Medical Association, through its Committees on Medical Economic and Industrial and Traumatic Surgery, will take steps toward bringing the attention of our insurance friends to these mutual problems.

C. E. Northcutt

President.



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GENERAL NEWS

NORTHCUTT NAMED TO CONFERENCE OFFICE AT A.M.A.

Conferring honor upon the Oklahoma State Medical Association and its president, C. E. Northcutt, M.D., was the selection of Dr. Northcutt as president-elect of the Conference of State Medical Association Presidents at the meeting of the American Medical Association in Chicago June 21-25. The conference, made up of presidents of all state medical association presidents, is one of A.M.A.'s most important policy-making bodies.

Officers of the O.S.M.A. attending the A.M.A. were Dr. Northcutt, George Garrison, M.D., Oklahoma City, President-Elect; Paul Champlin, M.D., Enid, 1947 President; Lewis J. Moorman, M.D., Oklahoma City, Secretary; and Dick Graham, Executive Secretary, and John K. Hart, Associate Executive Secretary. Delegates were James Stevenson, M.D., Tulsa, and C. R. Rountree, M.D., Oklahoma City. A total of 102 Oklahomans were among the 11-963 registrants at the annual A.M.A. session.

Rountree on Committee

Serving on the committee on miscellaneous business was C. R. Rountree, M.D. Of the resolutions adopted by the House of Delegates, the miscellaneous committee's recommendation concerning blood banks was of particular importance. The report of that committee follows in part: "... Realizing the possibility of a national emergency requiring large amounts of blood in the treatment of civilian and military casualties and realizing the unique position of the American Red Cross in disaster relief, your Committee is of the opinion that no change should be made at this time in the 'approval in principle' of the participation of the American Red Cross in the national blood program voted at the Interim Session in January, 1948. . . . the 'Approval in Principle' being construed as follows: First, local control must be by the county medical society. Second, the local medical society should be the contact in the initial contemplation of inauguration of a new blood bank. Third, no publicity nor news releases shall be released except by mutual consent of the local county medical society and the local chapter of the American Red Cross. Fourth, difference of opinion in establishment or operation of a blood bank in either administrative or technical detail shall be arbitrated at state levels by joint committees from the state medical society and the American Red Cross. . . . Other resolutions adopted include the following: governing fields of medical education and hospitals, military service for physicians, prepaid medical care plans, specialty boards, medical care, rural health, industrial medicine, and many others.

Election of Officers

James Stevenson, M.D., Tulsa, was nominated for the Council on Medical Service and made an outstanding showing in the run off against Joseph D. McCarthy, M.D., Omaha, who was named to the Council.

Election of officers was held June 24 and Ernest Edward Irons, M.D., Chicago, was named President-Elect of the American Medical Association. He has practiced medicine in Chicago since his graduation at Rush Medical College in 1903. He became an assistant instructor in pathology and bacteriology at the University of Chicago in 1902, obtained a Ph.D. degree at Chicago in 1912, and currently is professor of clinical medicine in the University of Illinois. A leader in the Association for many years, he has held several offices in state and national medical associations and boards.

Other officers elected were: F. W. Fouts, M.D., Omaha, vice-president; George F. Lull, M.D., Chicago, secretary;

Josiah J. Moore, M.D., Chicago, treasurer; F. F. Borzell, M.D., Philadelphia, speaker, house of delegates; and James R. Reuling, M.D., Bayside, N. Y., vice-speaker. Trustees elected are Gunnar Gundersen, M.D., La Cross, Wis., 1953; Edwin S. Hamilton, M.D., Kankakee, Ill., 1953; Walter B. Martin, M.D., Norfolk, Va., 1951. John H. O'Shea, M.D., Spokaue, Wash. was named to the judicial council and Alphonse McMahon, M.D., St. Louis, was elected to the council on scientific assembly. Those elected to the council on medical education and hospitals were Harvey B. Stone, M.D., Baltimore, and William L. Pressley, Due West, S. C.; and for the council on medical service, Harry B. Mulholland, Charlottesville, Va.; and Joseph D. McCarthy, M.D., Omaha.

A.M.A. Prexy Speaks

"Men live in the United States in good health to a greater average than ever before in the history of any nation," R. L. Sensenich, M.D., President of the A.M.A., said in his inaugural address.

"The general levels of health and added longevity accomplished by health education, medical research and development and the use of new methods in prevention and treatment of disease mark scientific advances in medicine unequaled in any comparable division of science," he declared.

Committee Reports

The reports of the committee to study conditions of general practice and committee on nursing problems revealed that "... the hospital staff should be the sole deciding body as to who may practice medicine in the hospital either as a staff member or as having hospital privileges, since the certifying boards pass only on the ability of a man to perform work in his specialty."

Concerning nursing the committee reported "it is estimated that about 400,000 nurses will be required to care for the American people in 1949. The committee feels that this can be accomplished. . . . The committee recommends that changes be made in the present method of training nurses; that in the future nurses be made up of two main groups—the professional nurse and the *trained* practical nurse. The requirements, duties, and courses of training of both main groups have been outlined."

The supplementary report of the committee on rural medical service brought out the following: "The interest of farm people in their health problems is receiving increasingly widespread attention. In at least 19 states, health councils on the state and community level have been organized under the stimulus and guidance of the medical profession. This cooperative activity of the medical profession with the laity in the promotion of public benefits will produce other advantages far beyond their immediate objectives."

A resume of all resolutions adopted by the House of Delegates can be found in the Journal of the American Medical Association where a complete report concerning the meeting is given.

Among the awards made at the A.M.A. was the presentation of the American Medical Association Distinguished Service Medal, which is awarded annually for scientific advancement in the field of medicine. The medal was given to Isaac Arthur Abt, M.D.



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RESEARCH
IN THE SERVICE
OF MEDICINE

1. Chalgren, W. S., and Baker, A. B.: Tropical Diseases: Involvement of Nervous System, *Arch. Path.* 41:66 (Jan.) 1946.
2. Brawne, D. C.; McHardy, G., and Spellberg, M. A.: Statistical Evaluation of Amebiasis, *Gastroenterology* 4:154 (Feb.) 1945.
3. Mansan-Bahr, P.: Some Tropical Diseases in General Practice: "A Post-War Legacy," *Glasgow M. J.* 27:123 (May) 1946.

MEDICAL SCHOOL GIVEN CLASS A RATING BY A.M.A.

The University of Oklahoma School of Medicine has been granted "unqualified accreditation" as a Class A institution by the American Medical Association Council on Education, announced Dr. George L. Cross, president of the university.

The announcement, which was made July 20, ends the long controversy within the state over the standing of the medical school. The last legislature increased appropriations, although it was believed to be insufficient.

"The administration of this school has greatly appreciated the aid of medical interests in the state," said Dr. Mark R. Everett, dean.

The school has been near to losing accredited rating by the council for several years and through the years the problem has hinged on lack of sufficient appropriations by the legislature. Since the resignation of Dr. Jacques P. Gray as dean last summer, a general reshuffling of personnel and partial completion of a \$1 million building program has apparently improved the hospitals and the school.

Further developments scheduled for action during the summer include the opening of several additional wards in the hospital, establishment of teaching affiliations with other hospitals and a revision of the school's curriculum, it was said.

TWO MORE FIFTY YEAR PINS ARE AWARDED

Proud wearers of Fifty Year Pins are two more O.S.M.A. members whose lapel pins have been presented in special ceremonies during the past month. D. P. Richardson, M.D., Union City, and S. L. Burns, M.D., Stonewall have each been awarded the small lapel pin denoting 50 or more years in the active practice of medicine. Twelve of the pins were presented at the Annual Meeting May 19.

Dr. Richardson's pin was presented at a special dinner meeting of the Canadian County Medical Society. The presentation was made by Carroll Pounders, M.D., Oklahoma City, Councilor. C. E. Northeutt, M.D., President of the O.S.M.A. presented the 50 year pin to Dr. Burns at a Pontotoc-Murray Society meeting held in Ada. Clinton Gallaher, M.D., Councilor, was also present for the ceremony.

For more than half a century, Dr. Richardson has practiced in the Union City community, delivering over 3,000 babies in that time—some of them the third generation. He received his medical education at Louisville Medical School before coming to Oklahoma in 1894. "That was back in the horse and buggy days," Dr. Richardson says, "when there was a family on most every quarter section and sometimes two, living in sod houses and dug-outs. My principal occupation in the

early days was taking care of typhoid and malaria patients and delivering babies, sometimes as many as three in one day and night."

Dr. Richardson has been president of the Canadian County Medical Association, Rock Island Railway surgeon for 40 years, and has held other positions such as registered pharmacist, banker, outside of the medical field. He served as state bank commissioner by governor appointment to fill an unexpired term. Dr. Richardson has one son, a graduate of the University of Oklahoma and Harvard University.

Dr. Burns, who has also passed a half century in the practice of medicine, was graduated from Vanderbilt University School of Medicine.

Like many other early day physicians, he started practicing before he had completed his formal education. He began practice of medicine in Arkansas and practiced in Hennepin in 1904 to 1911, in Maxwell 1911 to 1928, and moved to Stratford in 1928. Dr. Burns lived in Stratford until 1943 when he moved to Stonewall. Dr. Burns and Sam A. McKeel, M.D., who was presented his 50 year pin at the annual meeting, spent their boyhoods not far apart and Dr. McKeel even recalls a trip to the grist mill and tanyard operated by Burns' grandfather in Tennessee.

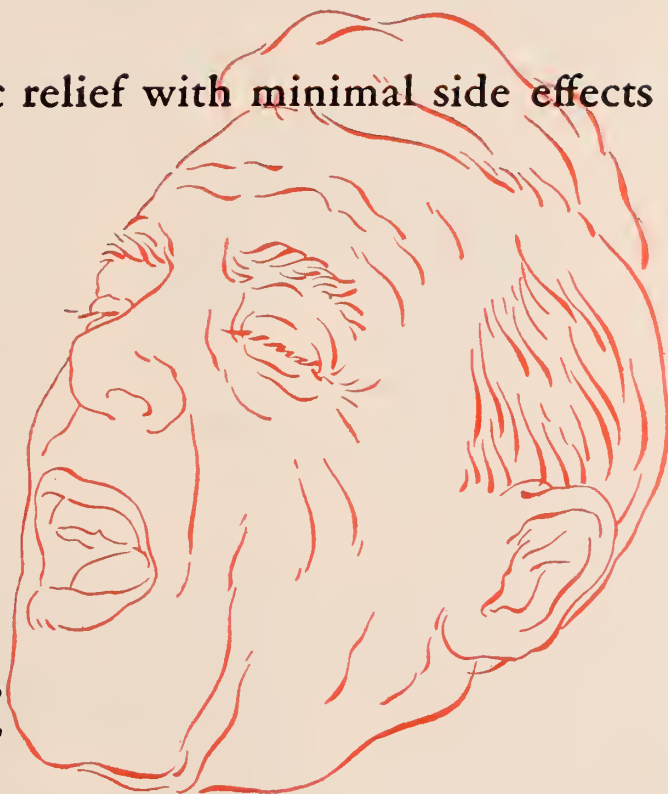
Left below—Carroll Pounders, M.D., Oklahoma City, Councilor, pins the Fifty Year pin on D. P. Richardson, Union City, at a special meeting of the Canadian County Medical Society at El Reno. Center below—Group picture of the Pontotoc-Murray County Medical Society at Ada during the meeting honoring S. L. Burns, Stonewall. Back row left to right—M. L. Lewis, M.D.; J. B. Gwin, M.D.; R. Bisbee, M.D.; G. K. Stephens, M.D.; C. F. Needham, M.D.; O. H. Miller, M.D.; E. D. Padberg, M.D.; R. E. Crowling, M.D.; and front row left to right—H. B. Yagol, M.D.; O. McBride, W. T. Gill, M.D.; C. E. Northeutt, M.D., O.S.M.A. President; S. L. Burns, M.D.; Clinton Gallaher, M.D., Councilor; and E. M. Gullatt, M.D. Right below—O.S.M.A. President C. E. Northeutt, M.D., is shown presenting S. L. Burns, Stonewall, with his Fifty Year Pin at the Pontotoc-Murray Society meeting.



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1. ARBESMAN, C. E.: *N. Y. State Jl. of Med.*, 47: 1775, 1947.
2. LOVELESS, M. H.: *Am. Jl. of Med.*, 3: 296, 1947.
3. BERNSTEIN, ROSE and FEINBERG: *Ill. Med. Jl.*, 92: 2, 1947.
4. OSBORNE, JORDON and RAUSCH: *Arch. of Derm. & Syph.*, 55: 318, 1947.

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ANNOUNCEMENTS

PROGRAM EXPANDS: THREE STATIONS ADDED

Plans have been completed for adding three additional radio stations to the four which are now carrying the "Tell Me, Doctor" radio series sponsored by the Association. Additional stations will be added from time to time as transcriptions are available and can be satisfactorily scheduled. The success of the radio programs will depend to a large extent upon the cooperation of the county societies and their willingness to assist in securing radio time and in censoring any commercial material which may be used in connection with these broadcasts.

Since the temporary discontinuation of the newspaper advertising program, plans have been formulated for making the newspaper publicity program more adaptable to existing circumstances. In an effort to achieve that purpose it is planned to prepare timely news releases for distribution to newspapers and wire services throughout the state when conditions warrant such releases.

The widespread public interest and possibility of a poliomyelitis epidemic during the summer months has prompted the issuance of the first news release through this medium. If response from the first release justifies the effort, other material will be released through the press on this same basis.

The remaining phases of the public relations program, awards, contests and literature, public speaking, visual education, and professional relations, cannot be put into operation until specific programs for each can be developed by the respective sub-committees. Meetings of these committees are scheduled tentatively for the months of August and September.

NAVY MEDICAL TRAINING PROGRAM

The Surgeon General of the Navy has announced the expansion of the bureau's professional training program for reserve and regular medical officers, which is similar to the recently expanded army medical training program. The object is to permit more navy doctors to meet the requirements for certification by the various American specialty boards, and to encourage the young doctor to intern under the auspices of the navy.

GOOD ENROLLMENT FOR EIGHTH CIRCUIT

The eighth circuit of the postgraduate course in gynecology began on August 9, with an excellent enrollment. The teaching centers are Woodward on Monday night, Guymon Tuesday nights, Alva Wednesday nights and Enid on Friday nights.

J. R. B. Branch, M.D., the instructor, will reside in Oklahoma City during the remainder of his teaching in Oklahoma.

The next and last circuit will begin the week of October 18 in the following teaching centers: Guthrie, Clinton, Watonga, El Reno and Oklahoma City (colored). It is urged that all physicians in this area mail their enrollments to the state office promptly upon receipt of the announcement letter. Other centers that have been completed in this course have reached an all-time high in both enrollment and percentage of attendance and it is felt that the physicians in this area will be as anxious to maintain this record as have those in other parts of the state.

The State Postgraduate Committee is now diligently seeking an instructor in internal medicine which is scheduled to start shortly after January 1, 1949.

NEW V. A. CONTRACT MADE

Newest development in the Veterans Home Town Medical Care Program of the Oklahoma State Medical Association is the fee schedule change effective July 1. The new contract is essentially the same as 1947 except for certain fees established for roentgenology. Members who are participating in the program will be advised of the changes.

COURSES ANNOUNCED

The Chicago Medical Society announces postgraduate courses in hematology and neurology September 13-18 and in cardiovascular and respiratory diseases September 20-25.

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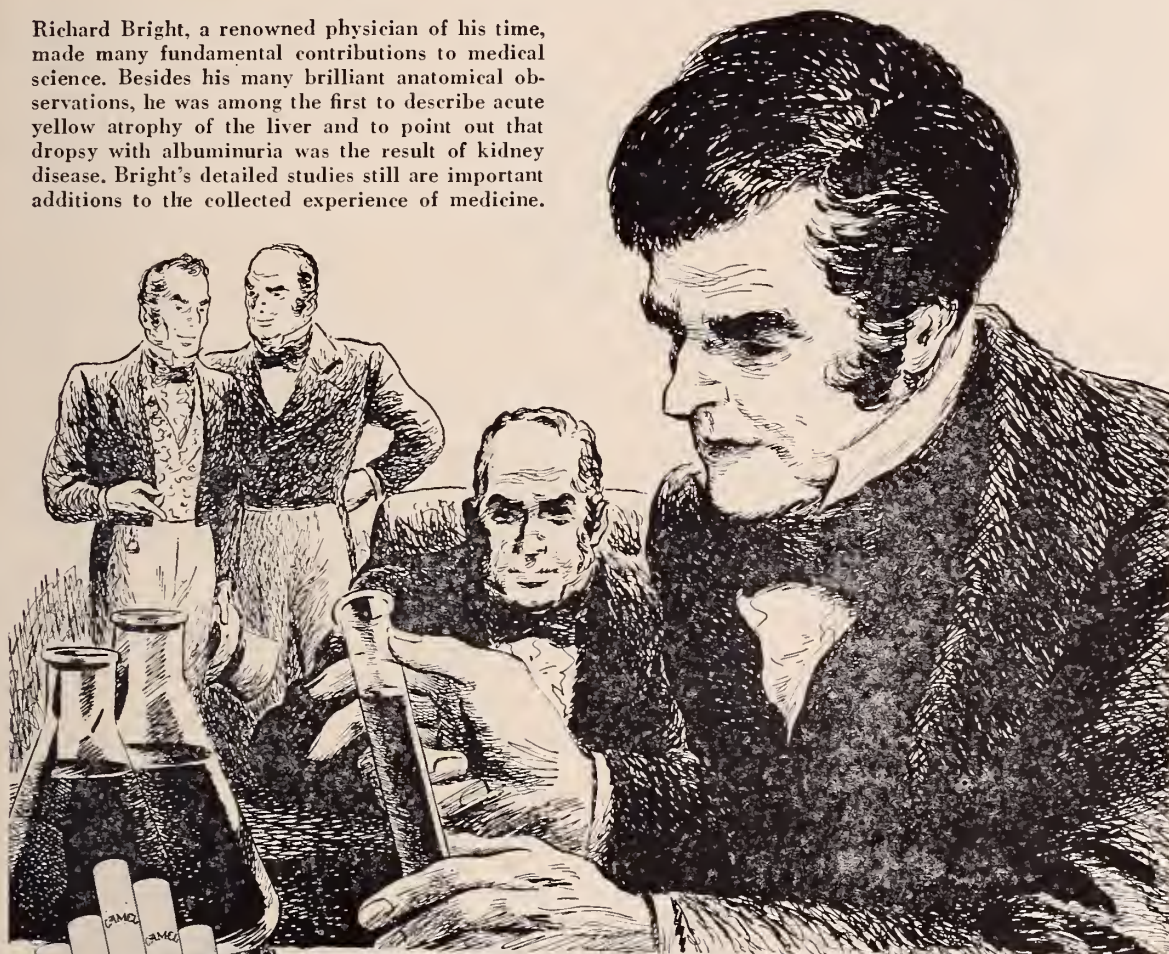
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MEDICAL SCHOOL NOTES

A new address for H. Glenn Gardiner (Med '35) is 925 South Holman Ave., Chicago, Ill. Dr. Gardiner is associated with Sears, Roebuck and Co. as medical director.

William R. Curtiss (Med '46) was a recent visitor at the Medical School. Following his internship at Evangelical Hospital, Detroit, Michigan, he has remained in Detroit where he is engaged in General Practice.

The Oklahoma City Clinic recently announced the association of Dr. Robert P. Holt (Med '43) in Orthopaedic Surgery and Dr. James J. Gable, Jr. (Med '42) in Internal Medicine.

The following members of the class of 1947 have recently become associated with the University of Oklahoma School of Medicine: Dr. Tom Sid Gafford, Jr., Fellow in Pathology; Dr. J. D. Cone, Fellow in Anatomy; Dr. Jess Miller, Fellow in Anatomy; Dr. Robert F. Redmond, Fellow in Pharmacology.

Fred Dinkler, (M.D.) (Med '47) is now a resident in Anesthesiology at the University Hospitals, Oklahoma City.

William L. Boud (Med '47) has a residency in Obstetrics at St. Anthony's, Oklahoma City.

Donald Clements (Med '47) is now located in Enid, Oklahoma at the General Hospital.

Charles R. Cochrane (Med '47), Robert L. Loy, Jr. (Med '47), and Bruce H. Brown, (Med '47) are all located at Mercy Hospital, Oklahoma City as residents.

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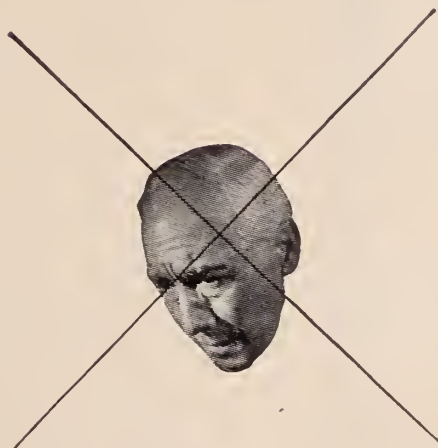
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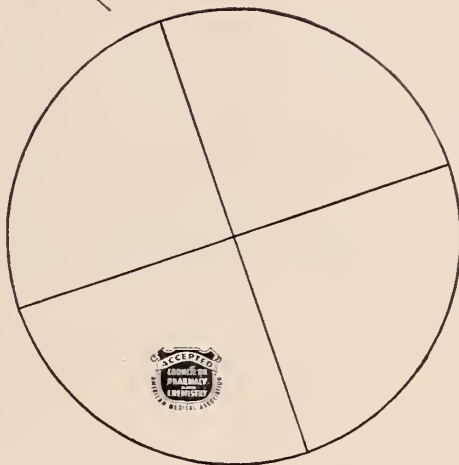
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OBITUARIES

Marion McDowell Webster, M.D. 1876-1948

Marion McDowell Webster, M.D., pioneer Oklahoma physician, died July 6, at Ada, Oklahoma.

Dr. Webster was born at Okford, Miss. and began practice of medicine at Troy, Indian Territory, in 1905. He moved to Stratford in 1907 where he made his home until he entered World War I. After he returned from the service, he began practice in Ada and had practiced there since that time.

Dr. Webster was active in all civic and medical organizations and was a charter member of the Ada Kiwanis Club.

Surviving are a daughter, Mrs. Donald Granger of Ada, and one son, Dr. Harrell Webster of Alabama, and three grandchildren.

Resolution

WHEREAS, M. M. Webster, M.D., one of our most respected and beloved members, died on July 6, 1948, at the age of 72 years, after having practiced his profession in Ada and the adjacent community for many years, and

WHEREAS, this society is deeply cognizant of its loss, and the loss to the community that must necessarily result from the death of Dr. Webster, and

WHEREAS, it is the desire of the society to extend to the members of Dr. Webster's family its sincere and heartfelt sympathy in their bereavement,

NOW THEREFORE, BE IT RESOLVED: That the Pontotoc-Murray County Medical Society does hereby recognize, with just pride, the long years devoted by Dr. Webster to the honorable and able practice of his profession; his sincere, unselfish, and cheerful service to humanity in his community; his pleasant and ethical relationships with his fellow practitioners; and his lifelong support of organized medicine.

That a copy of this resolution be delivered to the members of Dr. Webster's immediate family, conveying to them the sincere sympathy of the society;

That a copy of this resolution be spread upon the minutes of this society, and that another copy be delivered to the Oklahoma State Medical Association.

Respectfully submitted,

William T. Gill, M.D., President

Ollie McBride, M.D., Secretary

Pontotoc-Murray Co. Med. Society

William C. Vernon, M.D. 1892-1948

William C. Vernon, M.D., Okmulgee, died June 19 at

his home in Okmulgee. He had practiced medicine in Okmulgee since 1919 and was a partner in the Ming-Vernon Clinic and Hospital.

He was born in Lebanon, Mo., and was a graduate of the St. Louis University Medical College. He interned at Kansas City General Hospital and did postgraduate work in London, Berlin, Cornell University, Bellevue Hospital, New York, and Crown Heights Hospital, Brooklyn. He served as a captain in the medical corps in World War I and was medical examiner for Okmulgee draft board No. 1 during World War II.

Dr. Vernon was contract physician for the U. S. Indian Agency for 28 years.

Active in medical circles and civic organizations, Dr. Vernon was a charter member of the Okmulgee American Legion post, a 32nd degree Mason, Scottish Rite, and Consistory, a Shriner, Elk and member of the Odd Fellows, Okmulgee Gun Club and Sportsman Club. He was affiliated with Phi Chi medical fraternity and was a member of the First Presbyterian Church.

He is survived by his widow and two sons, Dr. William C. Vernon, Jr., and James Clinton Vernon, all of Okmulgee.

Resolution

WHEREAS, the members of the Okmulgee County Medical Society feel very deeply the loss of such a close associate and fellow laborer in the practice of medicine as William C. Vernon, M.D., and

WHEREAS, his hearty cooperation with the doctors and helpful words in time of need has been an inspiration to us and worthy of our emulation. He has served his community well. He was an active member of the Okmulgee County Medical Society, of the Oklahoma State Medical Association and of the American Medical Association; a member of the First Presbyterian church, a 32nd degree Mason, an Odd Fellow and Elk, and an active member of the Okmulgee Chamber of Commerce and other kindred civic organizations, Now Therefore,

BE IT RESOLVED: That a copy of this simple tribute be passed to the wife and two sons, that a copy be placed on the minutes of the Okmulgee County Medical Society and a copy sent to the Journal of the Oklahoma State Medical Association for publication and that our sympathy be extended to the bereaved family.

Respectfully submitted,

S. B. Leslie, M.D.

George L. Tracewell, M.D.

Charles S. Maben, M.D.

Welfare Committee Okmulgee County Medical Society

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BOOK REVIEWS

NEUROANATOMY. Fred A. Mettler, A.M., M.D., Ph.D., Associate Professor of Anatomy, College of Physicians and Surgeons, Columbia University, New York. Second Edition. 536 pages with 357 illustrations including 33 in color. C. V. Mosby Company, 1948.

The pattern of organization of this edition of Mettler's neuroanatomy textbook has not been fundamentally altered, the chapter titles and their sequence being identical with the original edition. Reorganization and additions have been made within most of the chapters. The book is 60 pages longer than the first edition. This does not represent the full extent of the enlargement however, since the new edition contains approximately 17 pages of reduced-size print; a feature not present in the first edition.

The outstanding characteristic of this edition is the orderly and thorough description of the blood supply of the brain. This information, much of which is new to this edition, has been segregated from the general text and is placed at the end of proper chapters or topics. It provides the best and most extensive account of this subject matter in any of the numerous current textbooks of neuroanatomy. The placing of this material in small print is a concession that the author need not have made in view of the increasing recognition of the significance of detail information on the blood supply of all parts of the central nervous system.

A most valuable addition, albeit very brief, is a description of the innervation of the meninges; a point of practical significance, yet seldom adequately described in neuroanatomy textbooks. The discussion of the cerebrospinal fluid has been rewritten in a well organized fashion.

To chapter III there has been added, under separate heading, a discussion of "Spinal mechanisms of micturition." The description does not indicate any finality in the solution of this complicated reflex and so it may be questioned why this particular autonomic reflex warrants unique consideration. The author's pointed preference for the term "compressor of the urethra" over the name "external sphincter" might have been explained, or at least a reference cited, in view of the general acceptance of the latter name.

Several colored figures have been added to the section on the cerebellum showing diagrammatically the projection relationships of the olive, pontine, and cerebellar nuclei to the cerebellar cortex.

One of the prime merits of the first edition of this textbook is the excellency of the illustrations. The same plates occur in the second edition; several have been profitably altered and about 20 new figures have been added. Not all of the new figures are of the high standard of those of the first edition. However, figures of the blood supply of various portions of the central nervous system are excellent. It is greatly to be regretted that the printing of some of the plates (e.g. Figs. 19, 83, 84, 86 and especially 68) is far inferior to the corresponding figures in the first edition. The figures of Weigert and Nissl stained sections remain outstanding.

The author has elaborated the index to his text by more than 20 per cent, which considerably increases its service as a source of reference. While the excellent and extensive bibliography of the first edition has been augmented to bring it up to date a justifiable concession was made in reducing the total number of references so not to unduly enlarge the book.

This second edition of Mettler's Neuroanatomy can be heartily recommended both as a text and reference book in its field.—Garman H. Daron, Ph.D.

A HISTORY OF THE HEART AND THE CIRCULATION. Fredrick A. Willius, M.D., M.S., and Thomas J. Dry, M.A., M.B., Ch.B., M.S. 456 pages. Philadelphia: W. B. Saunders and Co., 1948.

In the preparation of this significant volume the authors have performed a monumental service. For cardiologists the history of the circulatory system is indispensable; for the general practitioner it is equally important. Never before in the history of medicine have the heart and circulation been so obviously important, never before has the cardiovascular system so definitely declared its place in the course of life and death. The wear and tear of modern life on the heart and circulation constitute medicine's leading challenge. To understand the present and to be able to appreciate the future and to favorably influence its course we must know the past.

It is obvious that there must be a better understanding of the diseases and the degenerative processes which are undermining the integrity of the human circulatory system. As far as we know, Willius and Dry are the first to attempt the task of assembling of all the known facts and through skillful coordination and integration they have given them a voice which eloquently connects the meager knowledge of antiquity with the revelation of successive truths leading to the shocking consciousness of what we know today.

Not only should this work help to bring about a better understanding of present cardiovascular problems and serve as a guide for the future but it should make a much needed cultural contribution.

In the first paragraph of the preface the authors significantly exhibit this need when they name four of the "essential and intimately related principles of medicine," the *science*, the *art*, the *ethics*, and the *culture*. The latter they consider "... a most important yet frequently neglected principle. . . ." Few books contain so much well ordered knowledge, on a given subject, so readable, and so readily available.—Lewis J. Moorman, M.D.

"These studies (literary pursuits) employ youth, give pleasure to old age, make prosperity more prosperous, are a refuge and a solace in sorrow, amuse us when at home, do not hinder us in our duties abroad, make our nights less lonely, and in our travels and sojournings are our constant companions."—Cicero.

"And as in a mighty throng of men, when some tumult has arisen, and the rabble has been roused to fury; firebrands and stones fly this way and that, since rage finds weapons. Anon, if they chance to see among them a man whose probity and merits give him influence, silence takes them, and they hearken attentively to his counsel; he diverts their angry thoughts with his words, and soothes their savage rage."—Virgil.

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this season



BY JULIO DE DIEGO

THE INTRODUCTION of Abbott's new antihistaminic, THENYLENE Hydrochloride, means that more allergic persons than ever before will be working, playing, sleeping in greater comfort. Some hay fever patients will be symptom-free; others will experience relief to a lesser degree. Side-effects will be limited.

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1. Feinberg, S. M., Bernstein, T. B. (1947), Histamine Antagonists, VIII. N-(α -Pyridyl)-N-(α -Thienyl)-N', N'-Dimethylethylenediamine, a New Antihistaminic Compound. Experimental and Clinical Experiences, J. Lab. & Clin. Med., 32:1370, November.
2. Feinberg, S. M. (1947), The Antihistaminic Drugs, Amer. J. Med., 3:560, November.

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HAVE YOU HEARD?

Howard L. Puckett, M.D., Stillwater, recently reported to the Stillwater Rotary Club on conditions in Europe as he observed them on a recent trip to Italy, Spain, Portugal, Holland and Switzerland.

Thornton Kell, M.D., a graduate of the University of Georgia, has arrived in Ardmore to be associated with Walter Hardy as surgeon at the Hardy sanitarium.

Clyde Kernek, M.D., and *Paul Kernek, M.D.*, Holdenville, have announced plans to construct a new clinic. They plan to be able to open the clinic by Sept. 1.

Royce Means, M.D., a graduate of the University of Oklahoma School of Medicine, is now associated with J. Hoyle Carlock, M.D. and C. D. Cunningham, M.D., Ardmore.

Thurman Shuller, M.D., has joined the staff of the McAlester Clinic. He is a brother of E. H. Shuller, M.D., a member of the clinic staff.

Newell C. Gaddis, M.D., is now in partnership with William E. Hubbard, M.D., Tipton. He was graduated from the Northwestern University School of Medicine and also holds a B.S. degree in engineering from Purdue.

Robert E. Dean, M.D., has opened the Dean Medical Clinic in Fairfax. He is a graduate of the University of Oklahoma.

The Norman Spastic Paralysis Institute has opened on the South Campus of the University of Oklahoma. The Institute is licensed for a maximum of 25 patients.

MEDICAL ABSTRACTS

PLASTIC SURGICAL REPAIR OF FACIAL PARALYSIS.
Paul W. Greely, M.D., Chicago. Archives of Surgery.
56:2 (February) 1948.

This is a short concise article and clearly evaluates the modern opinion of therapy of the condition of facial paralysis.

Selection of cases:—"In view of the experience of my colleagues and me with cases of facial paralysis in which it cannot be ascertained whether or not the nerve has actually been severed, we believe that some type of surgical repair should be undertaken if considerable spontaneous return of function has not become manifest within three or four months after injury."

SUMMARY

1. All patients with facial paralysis should be given the benefit of neurosurgical consultation before a plastic operative procedure is decided on. Nerve suture and nerve grafts give the most ideal results in selected cases. The operation of nerve anastomosis are not desirable because the associated movements involved in trying to move the face are usually more conspicuous than the original facial paralysis.

2. The simplest and most satisfactory plastic surgical connection is obtained by supporting the paralyzed face with strips of autogenous fascia lata. The use of tantalum in any form is not recommended for this purpose.
 —John F. Burton, M.D.

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\$20,000.00	accidental death		\$32.00	
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MEDICAL SOCIETIES AROUND THE STATE

Payne-Pawnee County

Two guest speakers from Ponca City presented the program at the June meeting of the Payne-Pawnee Medical Society. E. C. Mohler, M.D., spoke on Congestive Heart Failure and Thomas C. Glasscock, M.D., addressed the group on Varicose Veins. The meeting was held in Cushing.

Osage County

The Osage County Medical Society met June 21 for an informal dinner at the home of Roscoe Walker, M.D. William Loy, M.D., showed a film on surgical techniques and a round-table discussion followed the film.

Stephens County

Dr. and Mrs. N. C. Riley and Dr. and Mrs. E. B. Thomason entertained the members of the Stephens County Medical Society and the Auxiliary at a dinner held at the Elks Club in Duncan July 1. W. F. Lewis, M.D., Lawton, was guest speaker. Dr. Lewis also showed movies to the group.

Garfield County

The Garfield County Medical Society held a picnic for its members June 24. V. R. Hamble, M.D., headed the committee in charge with Avery B. Wight, M.D., and Leland F. Shyroek, M.D., also helping with the arrangements.

"Blessed is the man who, far from the business of the town, ploughs with his own oxen his ancestral fields, with mind free from all cares about money. This was the life of the ancient race of men. Such an one is not like the soldier, roused by the bugle's loud note, nor does he fear the angry main; he shuns the law courts and the proud portals of the rich."—Horace.

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"(It is absurd that a man should rule others, who cannot rule himself.) Self-control is the most necessary qualification of a leader of men."—Ovid.



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OFFICIAL PROCEEDINGS OF THE HOUSE OF DELEGATES OKLAHOMA STATE MEDICAL ASSOCIATION

May 16, 1948

Oklahoma City, Oklahoma

Following the recess, the House of Delegates reconvened for the remaining portion of the first session, at 8 P.M. in the Crystal Room of the Skirvin Hotel. The meeting was called to order by the Speaker, Dr. Garrison, and the Credentials Committee declared a quorum present.

Dr. Garrison stated that the first order of business would be handled by Dr. Paul Champlin, President. He then called upon Dr. Champlin.

Dr. Champlin said; "Tonight for the first time we are honoring many of those who have preceded me in the office of President of the Association. I feel that I have only carried on the work that they have initiated in the past. It is with great honor that I have the opportunity to award these Past Presidents of the Oklahoma State Medical Association their certificates. These certificates are being awarded to those Past Presidents prior to 1940, certificates since that time have been presented at the conclusion of the term of office. I think this is a wonderful idea. I think you all realize how much it takes out of a man to try to conscientiously carry out the plans of the Association — it is a tremendous job. Those of you who have been a member of the Council for the first time realize what an effort it is and the problems that come before the Council. It gives me great pleasure to award these certificates to the following:

David A. Myers, M.D., President 1910-11 (Dr. Myers resides in California and was unable to attend. His certificate will be sent to the California State Medical Association for presentation.)

James M. Byrum, M.D., Shawnee, President 1913-14—present.

John W. Riley, M.D., Oklahoma City, President 1914-15—not present.

J. Hutchings White, M.D., Muskogee, President 1915-16—present.

W. Albert Cook, M.D., Tulsa, President 1917-18—present.

Leonard S. Willour, M.D., McAlester, President 1918-19—not present.

Lewis J. Moorman, M.D., Oklahoma City, President 1919-20—present.

McLain Rogers, M.D., Clinton, President 1922-23—present.

Ralph V. Smith, M.D., Britton, President 1923-24—not present.

Everett S. Lain, M.D., Oklahoma City, President 1924-25—present.

Pleasant P. Nesbitt, M.D., Tulsa, President 1925-26—not present.

Arthur S. Risser, M.D., Blackwell, President 1926-27—not present.

Joseph S. Fulton, M.D., Atoka, President 1927-28—present.

Ellis Lamb, M.D., Clinton, President 1928-29—present.

Henry C. Weber, M.D., Bartlesville, President 1931-32—present.

Tracey H. McCarley, M.D., McAlester, President 1933-34—present.

Louis H. Ritzhaupt, M.D., Guthrie, President 1935-36—present.

George R. Osborn, M.D., Tulsa, President 1936-37—not present.

Sam A. McKeel, M.D., Ada, President 1937-38—present.

Henry K. Speed, M.D., Sayre, President 1938-39—present.

Walter A. Howard, M.D., Chelsea, President 1939-40—not present.

Following the presentation of certificates the Speaker read the Resolutions that were in his hands (these will be found in the Report of the Resolutions Committee in the Second Session).

The Speaker then stated that Reports of all Councilor Districts had been published in the Journal and asked the pleasure of the House. It was *moved* by C. W. Moore, M.D., Stillwater, *seconded* by Bruce Hinson, M.D., Enid, that these Reports be approved as published. The motion *carried*.

The Speaker then stated that two of the published Committee Reports, namely that of the Crippled Children's Committee and the Study and Control of Tuberculosis Committee, did not carry any specific recommendation and had been published in the Journal. It was *moved* by Onis Hazel, M.D., Oklahoma City, *seconded* by H. A. Higgins, M.D., Ardmore, that these two Reports be *accepted* as published. The motion *carried*.

The Speaker stated that although the published Report of the Insurance Committee did not carry a specific recommendation, it did carry a statement that should be again impressed upon the House, i. e., "It seems appropriate here to point out that a physician cannot increase his protection by making contracts with different insurance companies. If you desire more insurance coverage, increase your insurance in the company with whom you now have insurance. You cannot have duplicate coverage in more than one insurance company." It was *moved* by H. A. Higgins, M.D., Ardmore, *seconded* by John Cotteral, M.D., Henryetta, that this statement be given cognizance. The motion *carried*.

The next Report to be discussed was that of the Negerology, and the Chairman F. W. Boadway, M.D., Ardmore, was called to the Speaker's stand to read this report. Dr. Boadway read the following names of members who had passed away since the last Annual Meeting: A. W. Herron, M.D., Vinita, May, 1947; George R. Tabor, M.D., Tishomingo, May, 1947; C. G. Spears, M.D., Altus, May, 1947; A. A. Weber, M.D., Bessie, May, 1947; Lee W. Cotton, M.D., Enid, June, 1947; R. L. Browning, M.D., Pawnee, June, 1947; J. A. Bates, M.D., Oklahoma City, June, 1947; D. W. Bennett, M.D., Sentinel, July, 1947; Philip McCaleb, M.D., Morris, July, 1947; William E. Simon, M.D., Alva, July, 1947; E. L. Miller, M.D., Picher, July, 1947; A. W. Pigford, M.D., Tulsa, July, 1947; John M. Watson, M.D., Enid, July, 1947; W. A. Ball, M.D., Wanette, August, 1947; Zale Chaffin, M.D., Bakersfield, Cal., August, 1947; Catherine Brydia, M.D., Ada, August, 1947; G. W. Phillips, M.D., Sayre, August, 1947; T. F. Spurgeon, M.D., Frederick, August, 1947; A. S. Phelps, M.D., Oklahoma City, August, 1947; W. G. Husband, M.D., Hollis, September, 1947; W. W. Sames, M.D., Hartshorne, October, 1947; Gayfree Ellison, M.D., Paw-

huska, October, 1947; H. A. Calvert, M.D., Frederick, November, 1947; Roy E. Emanuel, M.D., Chickasha, December, 1947; Roy A. Zink, M.D., Tulsa, December, 1947; F. L. Carson, M.D., Shawnee, December, 1947; E. F. Lewis, M.D., January, 1948; Ralph W. Rucker, M.D., January, 1948; James P. Webb, M.D., Durant, February, 1948; Robert H. Gingles, M.D., Tahlequah, March, 1948; Reed Wolfe, M.D., Hugo, March, 1948; E. L. Cohenour, M.D., Tulsa, April, 1948; Kenneth Wilson, M.D., Oklahoma City, April, 1948.

Following the reading of the Neerology Report the House of Delegates stood in a moment's silence. It was then *moved* by C. N. Talley, M.D., Hollis, *seconded* by Bruce Hinson, M.D., Enid, that the Report be *approved* as read. The motion *carried*.

The Speaker continued, stating that other Reports had been published which did not carry any direct recommendation with the exception of the recommendation of the Judicial and Professional Relations Committee that the Medical Defense Fund be discontinued, and this recommendation was taken care of in the Council Report. Dr. Garrison asked the pleasure of the House regarding the Reports of the Judicial and Professional Relations Committee, the Medical Education and Hospitals Committee and the Committee for the Conservation of Health. It was *moved* by E. H. Shuller, M.D., McAlester, *seconded* by Finis Ewing, M.D., Muskogee, that the reports be *approved* as published. The motion *carried*.

At this time Dr. Garrison called upon A. R. Sugg, M.D., Ada, Vice-Speaker to come to the platform. Dr. Sugg took the platform and stated that the next order of business would be those Reports which had not been published.

The Report of the Committee on Industrial and Traumatic Surgery. There was no report from this Committee. The next Report called for was that of the Medical Advisory to the Vocational Rehabilitation Committee. There was no report. The Vice-Speaker then called for the report of the Veterans Care Committee. There was no report. Dr. Sugg then called for the report of the Rural Health Committee. Dr. Ned Burleson, Prague, Chairman of the Committee gave the following report:

Report of Committee on Rural Health

In Oklahoma there are two dominant farm organizations. One is the Farm Bureau, the other the Farmer's Union. The farm bureau has an excellent health program through the Blue Cross and Oklahoma Physician's service; every member of the Farm Bureau has the opportunity to enroll in these non-profit plans. The Home Demonstration Department of Oklahoma Agricultural and Mechanical College, annually, through the cooperation of the Cancer Committee and the Oklahoma Division of the Cancer Society, has as one of its projects lay education on cancer. Contact has been made with Mr. Ben Arnold, of the Farm Bureau, concerning additional health programs having joint sponsorship.

Health Councils — A health council has not been organized in this State. Conflicting reports have been received concerning their effectiveness. Our committee would appreciate further information and advice on this activity.

Hill-Burton Bill: One of the greatest forward steps in Rural Health has been the Hospital Construction Program under the State Department of Health. Oklahoma, through this official agency, is well under way in the program of federally aided hospital construction. As a matter of record, one of the first approved hospital construction projects in the nation to obtain the Surgeon General's approval came to the Nowata, Okla-

homa Hospital Association. Eleven hospital projects have received the approval of the State Agency and are now only awaiting clearance from Washington. A total of twenty hospital projects have been scheduled for acceptance by the State Agency for the remainder of the fiscal year ending June 30, 1948, at a total cost of \$4,117,339 of which sum \$1,353,970 will be federal aid money. A project construction schedule will be developed for each of the five years the plan is to be operated as established by law.

Eight construction projects recently have been completed or are nearly completed on a non-federal aid basis. It is not contemplated that our state will help counties unable to raise costs of construction and maintenance, at this time.

Prepaid Medical Care. Oklahoma's Blue Cross Plan for prepaid hospital service and the Oklahoma Physician's Service plan for prepaid medical service have made remarkable progress, not only in extensive enrollments but also in added service features. The state Blue Cross plan as of March 1 had two hundred and five thousand members and the Oklahoma Physician's Service a total of fifty-two thousand in the two years of its operation. Enrolled groups have been extended to at least three county-side groups and other county enrollment plans are in progress. Numerous community programs have been effective for several years. Prepaid hospital and medical service is the recognized way of giving the most constructive and progressive medical and hospital service, especially for the lower and middle income residents.

Among the larger groups of Oklahoma rural residents enrolled in the Blue Cross and Oklahoma Physician's Service non-profit plans are the Farm Bureau with six thousand five hundred participants, covering 29 counties; the Farmers Home Administration covering 24,000 persons, six Grange units having 900 persons and 22 Home Demonstration agencies with 850 persons insured. It is estimated that 80 per cent of the total number of farm families now have available the enrollment privileges in these two non-profit programs for medical and hospital services.

Health Education Program. An extensive newspaper advertising program covering all daily and most weekly newspapers each month with advertisements of subjects on public health, medical service, prepaid medical and hospital plans and other items of public interest and importance has been sponsored by the Oklahoma State Medical Association since the latter part of 1946. It is felt that the information contained in these advertisements is of direct educational value to the public of all income groups. Radio broadcasts of a public nature are scheduled in the near future.

Postgraduate teaching has been conducted actively and systematically for both rural and urban Oklahoma physicians for ten years. This program is a continuous one in which practically all phases of medicine and surgery have been covered or are scheduled to be taught by physicians of authority. Free mobile cancer and tuberculosis detection clinics are operated under the Tuberculosis Association and the Oklahoma Chapter of the American Cancer Society, with members of the Oklahoma State Medical Association providing free medical staffs of physicians.

Other Past, Present and Future Plans. In planning for future activities of the Rural Health Committee and to augment the program of further development and improvement the following five objectives have been outlined:

1. A continuous study and resurveying survey is to be carried on in cooperation with health agencies and

farm organizations as pertains to available hospital, medical and health services.

2. A constant effort is to be made to increase the number of persons to whom prepaid medical and hospital service plans can be offered.

3. A study, a consultation with, and a survey of rural areas as to their needs for health services are to be made and self assistance by the individual community is to be promoted and encouraged.

4. Health education through all facilities reaching rural areas is to be promoted.

5. The teaching program of the State University School of Medicine is to be revamped so as to include more emphasis on general practice and to stimulate graduates to establish their practices in rural areas.

The Oklahoma State Medical Association is attempting to promote better public relations through a rather extensive program. Our Committee on Public Relations has spent many hours of toil, and worry and a considerable amount of money is allocated for the purpose of educating the public to the proposition that the medical profession is doing a good job and can do better with help. But we well know that actions speak louder than words. It is possible that many of us are doing things that are going to nullify all that our Public Relations Committee can do, especially when we realize that there are those who would like very much to run our business for us and they are getting wonderful cooperation from the Federal government.

The Colorado State Medical Association is under taking an extensive campaign of self discipline in an attempt to help improve public relations. It might help us if we could undertake a similar program. Many of us are charging unreasonable fees for such insignificant services as a sample of blood for a Wassermann test. I have had several patients come from Oklahoma City just to have me take their blood for premarital examination and other purposes. They told me that the doctor in Oklahoma City would charge them \$10.00 and then the nurse did the work and the doctor never saw them. We all know of such instances in which the doctor is not being quite fair. I have heard it suggested that we are sooner or later going to have to establish a fee schedule such as the one agreed on with the Veterans Administration to be applied to all medical work. That, in itself would contribute some to the increase in rural doctors of medicine by eliminating the attractiveness of high fees in the urban areas. We realize that such a program could not be established until many of the urban doctors experienced some severe adversity. As long as they are successful in getting unreasonable fees for petty services many of them would not consider being a party to such an agreement.

Patients all over the country are voicing bitter criticism of the medical profession because of their inability to obtain the services of a physician at night. Scores of letters are being received at American Medical Association offices each week from patients who complain that doctors decline to make night calls. At the National Conference on Medical Service, held in Chicago, February 8, someone told the audience that a state legislator whose child was seriously ill called five doctors and got five turn-downs. These complaints, piling up at an alarming rate, present a grave problem. Every doctor knows that a hasty turn down of a phone call at night creates ill feeling toward the entire medical profession. Some medical societies are solving this problem by setting up a special phone service. When a patient phones a doctor anytime during the night and the doctor declines to make the call, he gives his medical society a phone number to the patient. By calling the number, the patient is assured that a doctor will call.

More than 500 persons, a record number, attended the Third Annual Rural Health Conference held in Chicago's Palmer House on February 6 and 7. Chairman F. S. Crockett, M.D., Lafayette, Ind.; Secretary Virginia Shuler and members of the American Medical Committee on Rural Health were showered with laudatory comments on the session, which attracted leaders in child health and welfare work throughout the country, representatives of many farm groups and members of the medical profession. Improving the health services for the rural child was the theme of the meeting.

Chicago newspapers and national press associations published abstracts of nearly all of the papers delivered, but the one which attracted most attention was that of Dr. Maurice H. Friedman, of Washington, D. C., who said that "Selective Service figures have no place in any sober discussion of rural health." Such candid statements naturally attracted the attention of newspapermen, physicians, health leaders and farm leaders.

Speaking briefly at one of the rural conference luncheons, Dr. Acher C. Sudan, of Kremmling, Colorado, recent winner of the A.M.A. general practitioner award, said, "the only proper approach to many problems of rural health is by free men and women working together in a community spirit . . . we doctors have a big job to do, but we cannot do it all. We doctors must work with the farm folk and help them see that every dollar buys a dollar's worth of health improvement. If the dollar stays in the community, it is still a dollar, but if it is first sent to Washington it is diluted and trimmed until it comes back to the community as a mighty small piece of change."

The last paragraph in the talk given by Dr. Friedman mentioned above is a jewel, pregnant with memorable facts, "Our joint productive effort and our social organization can do as much as, if not more than, the medical profession by providing decent housing, adequate education, ample nutrition and satisfying recreational facilities. . . . The medical profession can and should cooperate in the establishment of fully effective public health systems in all communities. But a doctor's pills are no substitute for these essentials of good living. An occasional visit to a psychiatrist is not really a satisfactory substitute for a secure family life, for a sustaining spiritual and emotional environment. The church has recognized its responsibility in these matters. For many years the Federal Council of Churches of Christ in America have been holding annual conferences on Religion and Mental Health. Such efforts should be welcomed and supported by the laity and the medical profession alike. But in the end it is the responsibility of each family, and each community, to provide a proper environment for the growing child."

It was *moved* by Joseph T. Phelps, M.D., El Reno, *seconded* by D. B. Ensor, M.D., Alva, that the Report of the Rural Health Committee be *approved*. The motion *carried*.

Dr. Sugg, the Vice-Speaker then called for a report of the Allied Professions Committee. R. Q. Goodwin, M.D., Chairman, gave the following brief report: "This Committee does not have anything concrete to offer you tonight but we do have in progress some plans for better professional relations that will play a big part in the public relations program. The chairmanship of this Committee rotates and will fall to the pharmaceutical profession next year. We hope to develop our plans and believe that they will have a definite value."

It was *moved* by T. H. McCarley, M.D., McAlester, *seconded* by Bruce Hinson, M.D., Enid, that the Report

of the Allied Professions Committee be *approved*. The motion *carried*.

The Vice-Speaker then called for a Report of the Cancer Committee. L. Chester McHenry, M.D., Chairman, gave the following report:

Report of the Cancer Committee

Your Committee, through membership on the Board of Directors of the Oklahoma Division of the American Cancer Society, has taken an active part in the organization and direction of the program of that organization. There have been no meetings of the Committee as such but its members have attended several meetings of the Executive Committee, the Board of Directors and the Medical Advisory Committee of the Cancer Society. A brief resume of the cancer control program in the State during the past year is given below.

Public Education. Approximately 5000 articles appeared in the 250 newspapers of the State during 1947. Nearly 450,000 pieces of literature were distributed by direct mailings, cancer clinics, study clubs and distribution at county and state fairs. Exhibits were presented at over 40 county fairs and the three state fairs. Many of the radio stations carried broadcasts and spot announcements and year-round. Kits of literature concerning the cancer problem were distributed to school libraries and other libraries throughout the State and will be replenished with current material from time to time. Rural study courses and follow-ups have and are being conducted through Home Demonstration Clubs and are reaching many thousand rural homes.

To encourage the recruitment of student nurses for the nurses' training schools of the State the Cancer Society is offering five scholarships of \$300 each to five senior highschool girls who submit the best essays on "The Cost of Cancer." These scholarships will be awarded in the spring of 1948 and are sufficient to defray the tuition of these girls during their training as nurses.

Professional Education. The purpose of this portion of the cancer control program is to furnish up to date information regarding cancer to as many doctors and dentists of the State as possible and to keep them "cancer-conscious."

Symposia were held in ten cities of the State in the fall of 1947 by nationally known authorities in several fields of tumor work. These were attended by approximately 500 doctors and dentists. The expenses were born by the Oklahoma State Health Department and the Oklahoma Division of the American Cancer Society. The Oklahoma State Dental Society and the Oklahoma State Medical Association cooperated in arranging the symposia. Similar symposia covering other fields of tumor work will be held in 1948.

The Oklahoma Cancer Bulletin, sponsored by your Committee and at the expense of the Cancer Society, will be sent by mail to every doctor and dentist in the State at monthly intervals for the next two years. A binder for these was included in the first mailing. The mailing list includes all doctors and dentists of the State whether or not they are members of their respective associations. Your Committee has been able to preview these bulletins and is convinced that they will be an excellent means of furthering the purpose outlined above under "Professional Education."

Research. Two research projects at the School of Medicine have been granted supporting funds by the American Cancer Society from its national research fund after approval for such support by the Committee on Growth of the National Research Council. The Oklahoma Division has expended over \$26,000 in support of research projects from State Division funds.

Service. The Mobile Cancer Detection Clinic held 38 clinics in 1947 and is holding more this spring. Of 1,665 patients examined in 1947, 198 were found to have malignancies and further examination was advised for an additional 336. Approximately 150 members of the Oklahoma State Medical Association worked in these clinics.

The Indigent Care Program has been restricted by medical policy to paying transportation to and from the University Hospital in Oklahoma City and board and room for ambulant cancer patients under treatment in that institution. Hospital and medical bills are not paid.

Two Tumor Clinics have been established, one at St. John's Hospital in Tulsa, and one at University Hospital in Oklahoma City. A grant of \$5,000 was made to each of these clinics to assist in their establishment and operation.

Your Committee feels that definite progress has been made in the development of a Cancer Control Program in Oklahoma.

It was *moved* by Onis Hazel, M.D., Oklahoma City, *seconded* by F. W. Boadway, M.D., Ardmore, that the Report of the Cancer Committee be *approved*. The motion *carried*.

It was then stated by the Chair that the Postgraduate Committee had had a Report published but that the Chairman, Gregory Stanbro, M.D., Oklahoma City, had requested a moment to make some additional remarks. Dr. Stanbro was accorded the floor and made a few brief remarks concerning the program of the Postgraduate Committee and the progress made. No action was needed by the House on these remarks.

At this time Dr. George Garrison, Speaker, returned to the Speaker's stand. He stated that the next order of business would be the invitation for the next Annual Meeting of the Oklahoma State Medical Association.

W. S. Larrabee, M.D., Tulsa, was accorded the floor and extended the invitation of the Tulsa County Medical Society to the Oklahoma State Medical Association to hold its 56th Annual Meeting in Tulsa May 15-19, 1949. Upon *motion* by J. G. Edwards, M.D., Okmulgee, *seconded* by F. W. Boadway, M.D., Ardmore, this invitation was *accepted*.

The next item of business requiring the action of the House was the matter of Life, Honorary and Associate Memberships: Amalgamations; and Affiliate Fellowships in the A.M.A. The Speaker first read the following Honorary Memberships that had been approved by the Council: J. P. Beam, M.D., Arnett; E. M. Loyd, M.D., Taloga; P. H. Mayginnies, M.D., Tulsa; G. A. Comp, M.D., Manitou; S. M. Parks, M.D., Bartlesville; O. E. Howell, M.D., Norman; T. F. Renfrow, M.D., Billings; P. H. Anderson, M.D., Anadarko; W. M. Yeagan, M.D., Hollis; O. J. Street, M.D., Gould; R. M. Alexander, M.D., Paoli; John R. Walker, M.D., Enid; James I. Lyon, M.D., Edmond; Charles E. Barker, M.D., Oklahoma City; D. P. Richardson, M.D., Union City.

It was *moved* by M. V. Stanley, M.D., Tulsa, *seconded* by F. Keith Oehschlager, M.D., Yale, that the above names be *accepted* and *approved* for Honorary Membership. The motion *carried*.

Dr. Garrison then read the following Life Memberships that had been approved by the Council: D. C. McCalib, Colbert; E. P. Hathaway, Lawton; E. A. Kelleam, Wright City; W. H. McBrayer, Idabel; O. E. Templin, Alva; Robert S. Love, Oklahoma City; Joseph W. Shelton, Oklahoma City; John P. Torrey, Bartlesville; J. B. Athey, Bartlesville; Henry W. Larkin, Guthrie; J. M. Reeder, Konawa; S. L. Burns, Stonewall; T. L.

Seaborn, Ada; John E. Tompkins, Yukon; C. B. Hill, Guthrie; C. M. Maupin, Waurika; C. B. Reese, Sapulpa.

It was *moved* by W. S. Larrabee, M.D., Tulsa, *seconded* by Finis Ewing, M.D., Muskogee, that the above names be *accepted* and *approved* for Honorary Membership. The motion *carried*.

The Speaker then stated that one Amalgamation of County Societies, that of Washita-Kiowa, had been submitted and had been approved by the Council. It was *moved* by W. S. Larrabee, M.D., Tulsa, *seconded* by John Cotteral, M.D., Henryetta, that this amalgamation be *approved* and *accepted*. The motion *carried*.

It was next announced by the Chair that the following names had been approved by the Council for Associate Membership: K. W. Navin, M.D., Shawnee; T. F. Crabbe, M.D., Tahlequah. It was *moved* by Ellis Lamb, M.D., Clinton, *seconded* by F. Keith Oehschlager, M.D., Yale, that these names be *approved* and *accepted*. The motion *carried*.

The Speaker then called to the attention of the House that another Amalgamation had just been received, that of Craig-Ottawa, but that it could not be acted upon due to the fact that it was not received in time. He stated that this must be held until another meeting of the House.

The House was then advised by the Speaker that a situation had arisen regarding the dissolving of an amalgamation. He explained that amalgamation had been provided for but the dissolving of an amalgamation, had not been provided for, however, it was his opinion that what the House had the authority to give, it had the authority to take away. He stated that the following petition for dissolving of an amalgamation was in due form and signed by all officers of all counties involved: To: Officers of the Atoka-Coal-Bryan-Johnston County Medical Society.

Subject: Request for the privilege of reforming the Atoka-Coal County Medical Society.

1. The purpose of this communication is to request the Atoka-Coal-Bryan-Johnston County Medical Society to grant the privilege to the present members of this Society from Atoka and Coal Counties the right to withdraw from the amalgamation of the physicians of these four counties to reform the Atoka-Coal County Medical Society.

2. There are sufficient members of the Society at this time from Atoka County and Coal County to form an amalgamated society of the physicians residing therein under the Constitution and By-Laws of the Oklahoma State Medical Association.

3. The present members of the Atoka-Coal-Bryan-Johnston County Medical Society residing in Atoka and Coal Counties request this privilege on the sole basis that they would prefer to have their autonomy returned and for the further reason that they are of the opinion that the reforming of this Society can better extend the cause of medicine in these two counties.

4. If permission of the Atoka-Coal-Bryan-Johnston County Society is given to this request, the present members of the Society intend to petition the Council and the House of Delegates of the Oklahoma State Medical Association for the re-establishment of an amalgamated society to be known as the Atoka-Coal County Medical Society. They will, in turn, elect officers and conduct business as a County Society, beginning January 1, 1949.

Signed: T. H. Briggs, M.D., Coalgate
J. J. Hipes, M.D., Coalgate
J. B. Clark, M.D., Coalgate
J. S. Fulton, M.D., Atoka
C. D. Dale, M.D., Atoka

To the House of Delegates of the Oklahoma State Medical Association, Oklahoma City.

We, the undersigned members of the Oklahoma State Medical Association, residing in Atoka and Coal Counties request permission of the House of Delegates to reorganize the Atoka-Coal County Medical Society as of January 1, 1949.

(signatures as above)

It was *moved* by F. Keith Oehschlager, M.D., Yale, *seconded* by J. B. Snow, M.D., that this dissolution of county society be *approved* and that the Atoka-Coal County Medical Society be reformed. The motion *carried*.

The next item on the agenda was the names of those qualified for Affiliate Fellowship in the American Medical Association. Dr. Garrison read the following names which had been approved by the Council: P. H. Anderson; Charles E. Barker; C. B. Hill; E. M. Loyd; P. H. Maygiunes; O. E. Templin; John P. Torrey; W. M. Yeargan. It was *moved* by Bruce Hinson, M.D., Enid, *seconded* by L. S. McAlister, M.D., Muskogee, that these names be *approved* for presentation to the American Medical Association for Affiliate Fellowship. The motion *carried*.

SECOND SESSION OF THE HOUSE OF DELEGATES

The second session of the House of Delegates was called to order by the Speaker of the House in the Crystal Room of the Skirvin Hotel, Oklahoma City, following a brief recess after the first session. The Credentials Committee stated that a quorum was present.

The Speaker first called for the Report of the Resolutions Committee and Dr. James Stevenson, Tulsa, Chairman, was accorded the floor: Dr. Stevenson read the following Resolutions:

Resolution

WHEREAS, In the State of Oklahoma the practice of medicine is legally a franchise granted by the State to an individual after rigid technical training and due examination, a principle based on the theory that the practice of medicine involves an individual personal service which cannot be performed by an organization or corporation or other group, and

WHEREAS, The employment of doctors of medicine on a straight salary basis by Oklahoma hospitals for the purpose of practicing Radiology is a specific violation of that legal franchise, and

WHEREAS, The basic principle and the specific practice of employing doctors of medicine on a straight salary basis has been condemned by the American Medical Association and the American College of Radiology,

THEREFORE BE IT RESOLVED, that the Oklahoma State Medical Association disapprove fixed straight salary contracts between hospitals, excepting federal, state and local governmental agencies, and radiologists; and that the Oklahoma State Medical Association approve the contractual arrangements as recommended by the American College of Radiology.

(This Resolution passed by unanimous vote at the meeting on January 18, 1948, of the Oklahoma State Radiological Society, Mayo Hotel, Tulsa, Oklahoma.)

Dr. Stevenson stated that the Resolutions Committee *moved* adoption of this Resolution. The motion was *seconded* by W. S. Larrabee, M.D., Tulsa, and *carried*.

The next Resolution to be read was as follows:

Resolution

WHEREAS, It is the purpose of the State Medical Association to spend the twenty-five dollars from each member for educational purpose and the defeat of socialized medicine, and

WHEREAS, There is a National Organization that has been working very effectively to this, and

WHEREAS, This Organization definitely deserves the support of organized medicine

THEREFORE BE IT RESOLVED, That we recommend to the House of Delegates that five dollars per member of the money which is earmarked for use of the Committee on Public Policy and Publicity, be sent to the National Physicians Committee to assist in financing the important work that they are carrying on.

Dr. Stevenson pointed out the error in the amount of twenty-five dollars. This amount should read twenty dollars. He explained to the House that the Committee was in favor of the National Physicians Committee and believed that all physicians should support it, however, the Committee felt it was too late at this time to reallocate the funds of the Public Policy Committee, therefore *recommended disapproval* of this Resolution.

It was *moved* by W. S. Larrabee, M.D., Tulsa *seconded* by Bruce Hinson, M.D., Enid, that this Resolution *not be approved*. The motion *carried*.

The following Resolution was then read by the Chairman of the Committee:

Resolution

WHEREAS, the Tulsa County Medical Society recognizes the need for certain medical legislation in the State of Oklahoma which, in the opinion of the members of the Society, is completely desirable and of mutual benefit to the medical profession and the public alike, and

WHEREAS, the Tulsa County Medical Society wishes to take positive steps to place this suggested legislation into statutory law, and recognizing that Oklahoma State Medical Association, as the representative agency of the medical profession of Oklahoma, is the proper group to prosecute this program,

NOW, THEREFORE, BE IT RESOLVED, that the House of Delegates of the Oklahoma State Medical Association endorse the program of legislative activity as suggested below.

1. The enactment of legislation by the Oklahoma State Legislature at the next session of that body which shall prohibit any form of medical advertising through the use of any media which may be employed, by any duly licensed practitioner of the healing arts in the State of Oklahoma. It shall be recognized that an exception exists in the case of professional cards inserted in medical publications distributed exclusively to the medical profession. The provisions of this act shall apply to all duly licensed medical doctors, osteopaths, chiropractors, chiropodists, veterinarians, and optometrists. The importance of this act shall not be minimized.

2. The enactment of legislation which will automatically revoke the license of any duly licensed practitioner of the healing arts who shall be legally adjudged insane and committed to a state institution for the care of the insane. Provisions for the reinstatement of the license shall be included.

3. A continued effort to secure enactment of the general principles contained in the proposed W. Floyd Keller Bill requiring all coroners in Oklahoma to be licensed medical doctors, as approved at a recent and previous session of the House of Delegates.

4. A review of the statutory law now in existence to permit the consolidation of city and county public health departments into a single administrative agency. The purpose of such review shall be to determine the effectiveness of the existing legislation. Should remedy be indicated, the Association shall be instructed to act towards that end by the introduction of amending legislation.

BE IT FURTHER RESOLVED, that the Oklahoma State Medical Association take the full initiative in the preparation of these proposals into concrete and acceptable form for presentation to the Legislature; that the Association use every facility at its command to insure the prompt passage of these proposals at the 1949 session of the Oklahoma State Legislature.

BE IT FURTHER RESOLVED, that the House of Delegates shall have the privilege of voting upon the four proposed items separately, and that the terms of the resolution shall apply only to those measures which are approved.

BE IT FURTHER RESOLVED, that the Council shall, in the event of the approval of this resolution, render to the next session of the House of Delegates a full report of the manner in which the instructions in this resolution have been disposed of.

This resolution is respectfully submitted in the good faith that a definite need exists for the medical legislation as proposed.

Respectfully submitted this 16th day of May, 1948. (signed) Walter S. Larrabee, M.D., Chairman, Tulsa County Delegation at the official instructions of the Tulsa County Medical Society.

The Chairman, Dr. Stevenson, stated that the four items would be taken up for action one at a time. He stated that the Committee *moved* the enactment of Item No. 1. This motion *was lost for want of a second*.

Dr. Stevenson stated that the Committee wished to refer Item No. 2 to the House for action. It was *moved* by J. Hutchings White, M.D., Muskogee, *seconded* by McLain Rogers, M.D., Clinton, that this portion of the resolution be *tabled*.

The Chairman stated that Item No. 3 had already been considered and passed previously and required no action.

Item No. 4, stated Dr. Stevenson, had received the *approval* of the Committee. It was *moved* by T. H. Briggs, M.D., Coalgate, *seconded* by George Ross, M.D., Enid, that Item 4 of the resolution be *approved*. The motion *carried*.

Dr. Stevenson, Chairman, *moved* the adoption of the Resolution as a whole with the correcting motions made by the House. This motion was *seconded* by C. W. Moore, M.D., Stillwater, and *carried*.

This concluded the Report of the Resolutions Committee.

The Speaker then called for a Report of the Committee on Constitutions and By-Laws. Louis H. Ritzhaupt, M.D., Guthrie, Chairman, read the following Amendments to the Constitution and By-Laws:

Recommendations of the Committee to Revise the Constitution and By-Laws of the Oklahoma State Medical Association

(The placement of these amendments are predicated on publication in 1947-48 Directory)

Constitution

Article I: Add at the end of the sentence the word "Incorporated."

Article II: Purpose of the association. "This Association is formed to promote the science and art of medicine." and striking the present section.

Article VIII, Section 1: Line 5, after the word "Councilors" and before the word "as" insert the words "and Vice-Councilors."

Article VIII, Section 2: Insert at the end of the section "The President-Elect shall become President for a term of one year upon the expiration of his term as President-Elect."

Article VIII, Section 2: Line 5, between the words "Councilors" and "for" insert the words: "and Vice-Councilors."

Article VIII, Section 4: Line 3, add, between the words "appointment" and "being" the following words: "by the President," and to add at the end of the last sentence "and Councilors, whose terms shall be completed by their respective Vice-Councilors."

By-Laws

Chapter I, Section 1:

Chapter I, Section 1, add Subsection (a) to read as follows: "Any physician who is associated with the Armed Forces, Veterans Administration, or the United States Public Health Service and who does not possess a license to practice medicine in the State of Oklahoma but who otherwise meets the qualifications for membership may be elected to membership by a County Medical Society, but may not hold office or be a member of the House of Delegates."

Chapter I:

Chapter I, Section 3, subsection (d) be amended to insert the words "or residents" between the words "interns" and "on" in the first sentence, and to substitute a period for the comma following the word "Association" in line 3. Delete the phrase "for one-half of the regular dues of the State Association and," and insert the following phrase to begin the sentence, "No dues shall be assessed such members and they." Strike the words "two years" at the end of this subsection and insert the phrase "the period of hospital training" and add the sentence: "Such memberships shall not be considered in the computation of the number of delegates to which a component society is entitled."

Chapter II, Section 2:

Chapter II, Section 2, lines 3, 4 and 5. Delete the phrase in lines 3, 4, and 5 "Which shall be on the evening of the second day of the Annual session."

Chapter II, Section 3:

Strike subsection (a) and insert a new subsection as follows: (a) "Shall be appointed by the Scientific Work Committee and confirmed or rejected by the Council."

Chapter II, Section 3:

Delete subsection (b), Section 3, Chapter II.

Chapter II, Section 3, Subsection (c):

Chapter II, Section 3, Subsection (c) be made — "Section 4," PAPERS, and to delete the words: "before a section" in the first sentence and to designate the present section 4 as subsection (a).

Chapter II, Section 5:

Chapter II, Section 5 be deleted, same being covered by change in Chapter II, Section 3, Subsection (a).

Chapter III, Section 1:

Chapter III, Section 1 be amended to substitute the word "from" for "for" in the next to the last line of the section.

Chapter III, Section 4, Subsection (c):

Chapter III, Section 4, Subsection (c), add the following sentence at the end: "Likewise, the House of Delegates may disassociate any County Society from a District Society petition by a County Society of the District Society."

Chapter III, Section 4, Subsection (e):

Chapter III, Section 4, Subsection (e) (1) add the phrase "and to take such action as it deems necessary," delete the phrase "and may curtail any of the expense submitted by this budget but shall have no authority to increase same."

Chapter III, Section 5:

Chapter III, Section 5 be amended by substituting the following as item (4) "Nomination of Officers" and to

renumber the present items (4) through (12) in consecutive order to make 13.

Chapter V, Section 2:

Chapter 5, Section 2, add the following sentence at the end of Section 2: "Nomination of officers, councilors and vice-councilors shall be made during the opening session of the House of Delegates as shown in Chapter III, Section 5, subsection 4 of these By-Laws."

Chapter V, Section 5:

Chapter V, Section 5, add the words: "and one Vice-Councilor" after the word "Councilor" and before the word "is" in line 1 and the words "and vice-councilors" to follow the word "councilors" and preceding the word "in" in line 4 of section 5.

Chapter VII, Section 5, Subsection (d):

Chapter VII, Section 5, subsection (d), substitute the word "from" for the word "for" in the next to last line of the subsection.

Chapter VII, Section 6:

Chapter VII, Section 6, amend as follows: The present Section 6 to become subsection (b) and the following to become Section 6: "Component Societies." "Each Component Society of this Association shall file a copy of their Constitution and By-Laws with the Executive Secretary." This is to be subsection (a).

Chapter VII, Subsection (b) (after revision)

Chapter VII, subsection (b) (as amended), add the following sentence at the end of subsection (b): "From the time of adoption of this amendment it shall be mandatory for each Component Society to secure a charter within six months."

Chapter VII, Section 1:

Chapter VII, Section 1, delete Section 1, after the title and to add the following subsections:

(a) The Council shall hold regular meetings during the year. Such meetings to be every three month with one meeting held no later than 30 days prior to the date of the Annual Meeting at which time the budget of the Association will be considered."

(b) The Council shall meet at the call of the President or by petition to the President by a majority of the Council.

(c) The Council shall meet daily during the Annual Session.

(d) The Council shall meet on the last day of the Annual Meeting for the installation of newly elected members. They shall program the mandates and recommendations of the House of Delegates and pursue other duties as provided by the Constitution and By-Laws.

Chapter IX, Section 1:

Chapter IX, Section 1, delete the listing of the "Judicial and Professional Relations" Standing Committee.

Chapter IX, Section 3, Subsection (a):

Chapter IX, Section 3, Subsection (a), Line 7 after word "otherwise" and before word "as" change the word "Qualified" to the word "disqualified."

Chapter IX, Section 5:

Chapter IX, Section 5, delete the entire second sentence of the section which reads: "They shall receive reports of Section Officers and assist them in the preparation of section programs, these being modified or changed to conform to the general interests of the Association."

Chapter IX, Section 6:

Chapter IX, Section 6, line 13 after the word "Health" and before the word "of" add the words: "and the State Board of Health."

Chapter IX, Section 7:

Chapter IX, Section 7 delete the words "Medical Department of the Oklahoma University" in lines 4 and 5 and substitute the words "School of Medicine of the

University of Oklahoma."

Chapter IX, Section 8:

Chapter IX, Section 8, delete all of Section 8.

Section 9 to be renumbered Section 8.

Chapter IX, Section 9, subsection (b):

Chapter IX, Section 9, subsection (b), add the words "or more" to immediately follow the word "Three" in line 1 and before "members" in line 2.

Chapter XI, (Revision A)

Chapter XI, be amended to make the following changes in this Chapter:

1. Add the words "and District" after the word "County" to the title.
2. Following the word "county" in line 1, add "or District."
3. Line 6 after word "By-Laws" and before word "does" insert: "provided that their Constitution and By-Laws."
4. Re-designate the numbering of the following Sections:
 - a. Renumber the present Section 3, as Section 2.
 - b. Renumber the present Section 2, as Section 3.
 - c. Redesignate the present Section 4 as subsection (b) of the redesignated Section 3.
 - d. Renumber Section 5 as Section 4.
 - e. Renumber Section 6 as Section 5.
 - f. Renumber Section 7 as subsection (a) of the re-numbered Section 5.
 - g. Renumber Section 8 as Section 6.

Chapter XI (after Revision A):

Chapter XI, Section 1, add a subsection (a) to read as follows: (a) Requirements for Establishing and Maintaining a County Society. To create or re-activate a County Medical Society, the provision of Section 3 of this Chapter of these By-Laws must be met. To maintain a County Society the number of active members must be at all times at least five in number, the Society must meet at least six times each year with one meeting being in either November or December for the purpose of electing officers, delegates and alternates of the County Society for the succeeding year. The Secretary of the Society at the time of the election of new officers shall immediately transmit in writing to the Executive Office of this Association the results of its election.

Chapter XI (after Revision A):

Chapter XI, Section 1, add a subsection (b) to read as follows: "(b) To Create and Maintain a District Society. As provided in Chapter III, Section 4, subsection (c), the House of Delegates shall approve the creation of District Societies and representation in the House of Delegates shall be in conformity with the provisions of Chapter III, Section 1.

To organize a District Society there must be at least ten active members of this Association within the District and at least one member shall reside in each of the respective counties of the District. The County Societies and members of this Association involved in the organization of the District Society shall by mutual agreement notify the Executive Officers of this Association regarding their intention. The Request shall be presented to the Council at any regular meeting, at least ninety days prior to the annual meeting of this Association. The council, with their recommendation, shall publish in the Journal at least thirty days prior to the annual meeting, the request for an organization of a District Society. When such a District Society is approved by the House of Delegates it shall be issued a charter and the component county society shall surrender their charters to the Executive Office of the Association. The provisions of this Constitution and By-Laws governing County So-

cieties shall apply to District Societies.

Chapter XI (after Revision A):

Chapter XI, Section 2, subsection (a), add the following sentence at the end: "Should no County Society exist in the County in which a physician resides he may be eligible for membership in an adjoining County Society until such time as there are sufficient qualified physicians residing in the County to formulate a Society within the County."

Chapter XI (after Revision A):

Chapter XI, Section 3, add a subsection (c) to read as follows:

(c) To Dissolve District Societies. Should the members of a District Society desire to disassociate themselves as a District Society the action shall be taken at a regular meeting of the District Society in sufficient time to give ninety days notice of such request to the Executive Office of the Association and the action of the District Society will be presented to the House of Delegates for approval. Co-existing with this action the physicians from the counties making up the District Society may petition the House of Delegates for the creation of a County Society within their respective county as otherwise provided in these By-Laws.

Following the holding of the regular meeting of the District Society should the members from the County desiring to withdraw still be of the same decision, a petition signed by a majority of the members residing in the County wishing to withdraw shall be submitted to the House of Delegates through the Executive Office of the Association at least ninety days prior to the Annual Meeting.

Co-existing with this action the physicians from the withdrawing County may petition the House of Delegates for the creation of a County Society within their County as otherwise provided in these By-Laws.

Chapter XI, Section 4 (after Revision A)

Chapter XI, Section 4, substitute the word "Council" for the words "Judicial and Professional Relations Committee."

Chapter XI, Section 5 (after Revision):

Chapter XI, Section 5, delete the words: "eligible physician and/or surgeon in the county" and substitute therefore the words: "doctor of medicine who meets the qualifications for membership in the County."

Following the reading of the Amendments, discussion was called for. Chapter XI, Section 1, subsection (a) reading "the Society must meet at least six times each year" brought various comments from members of the House of Delegates. It was moved by J. T. Colwick, M.D., Durant, seconded by Malcom Phelps, M.D., El Reno, that this be changed to four meetings a year. The motion did not carry.

It was then moved by Finis Ewing, M.D., Muskogee, seconded by Bruce Hinson, M.D., Enid, that the Report of the Committee on Revision of the Constitution and By-Laws be accepted and the amendments approved. The motion carried.

The Speaker, Dr. Garrison, then stated that it was time for the Election of Officers. He entertained a nomination for President-Elect. Shade Neely, M.D., Muskogee, was recognized and said, "The man I am proposing for nomination is known to every man in this room. He has been a wheel horse in organized medicine, having been on the Council for ten or 12 years. He also has been the President of his home town Medical Society. I nominate Dr. George Garrison of Oklahoma City for President-Elect." Dr. Garrison then called upon Dr. A. R. Sugg, Vice-Speaker to preside. The nomination was supported by Malcom Phelps, M.D., El Reno, and

Dr. Garrison was elected by *acclamation*.

Dr. Garrison spoke to the House, saying: "Thank you, gentlemen. All I can say is that to the best of my ability and with your help I shall carry on in whatever capacity I can. But, let me say this, that without your help and cooperation, no man can succeed."

The next office to be filled was that of Vice-President. Dr. Garrison called for nominations. C. M. Hodgson, M.D., Kingfisher was recognized and nominated Violet Sturgeon, M.D., Kingfisher. It was *moved* by Louis Ritzhaupt, M.D., Guthrie that the nominations cease and Dr. Sturgeon be elected by *acclamation*. The motion was supported by Bruce Hinson, M.D., Enid and *carried*.

The Speaker then called for nominations for Speaker of the House. Onis Hazel, M.D., Oklahoma City was recognized and nominated L. Chester McHenry, M.D., Oklahoma City. It was *moved* by Clifton Gallaher, M.D., Shawnee that the nominations cease and Dr. McHenry be elected by *acclamation*. The motion was *seconded* by C. M. Hodgson, M.D., Kingfisher and *carried*.

The next office to be filled was that of Vice-Speaker. Nominations were called for and Dr. M. V. Stanley of Tulsa was recognized. Dr. Stanley nominated W. A. Showman, M.D., Tulsa. The Chair then recognized Malcolm Phelps, M.D., El Reno who nominated A. R. Sugg, M.D., Ada. A *ballot* of the House was taken by the Tellers of Election, the results of which *elected* A. R. Sugg, M.D., of Ada.

The Chair then called for nominations for Delegate to the A.M.A. Finis Ewing, M.D., Muskogee was recognized and nominated James Stevenson, M.D., Tulsa, for re-election. It was *moved* by Ned Burleson, M.D., Prague, that the nominations cease and Dr. Stevenson be elected by *acclamation*. The motion was *seconded* by George Ross, M.D., Enid and *carried*.

Alternate Delegate to the A.M.A. was the next office to be filled. L. S. McAlister, M.D., Muskogee *moved* that Finis Ewing, M.D., Muskogee be re-elected. The motion was *seconded* by F. R. First, Jr., M.D., Checotah and *carried*.

The Speaker then called for nominations for the second office of Alternate Delegate, and recognized W. W. Cotton, M.D., Atoka. Dr. Cotton nominated John Burton, M.D., Oklahoma City. It was *moved* by H. A. Higgins, M.D., Ardmore, *seconded* by James Stevenson, M.D., Tulsa, that the nominations cease and Dr. Burton be elected by *acclamation*. The motion *carried*.

Dr. Garrison stated that the position of Councilor for District No. 1 was open for election as Dr. O. E. Templin had been elected and had resigned. Dr. D. B. Ensor had been appointed to fill this position until this meeting of the House when a Councilor could be elected. He recognized John Simou, M.D., Alva, who nominated Dr. D. B. Ensor of Alva. It was *moved* by W. W. Cotton, M.D., Atoka, *seconded* by Onis Hazel, M.D., Oklahoma City, that the nominations cease and Dr. Ensor be elected by *acclamation*. The motion *carried*.

The positions for Councilor and Vice-Councilor for District 2, announced the Speaker, were now to be filled. Members of District No. 2 nominated L. G. Livingston, M.D., Cordell for re-election as Councilor and O. C. Standifer, M.D., Elk City for re-election as Vice-Councilor. It was *moved* by Finis Ewing, M.D., Muskogee, *seconded* by A. R. Sugg, M.D., Ada, that Dr. Livingston and Dr. Standifer be elected by *acclamation*. The motion *carried*.

The Speaker then called for nominations for Councilor and Vice-Councilor for District 5. H. A. Higgins, M.D., Ardmore nominated J. Hobson Veazey, M.D., Ardmore

as Councilor and J. L. Patterson, M.D., Duncan as Vice-Councilor. C. M. Maupiu, M.D., Waurika nominated J. L. Patterson, M.D., Duncan as Councilor and O. J. Hagg, M.D., Waurika as Vice-Councilor. A *ballot* was taken by the Tellers of Election and the results showed J. Hobson Veazey, M.D., Ardmore to be elected Councilor and O. J. Hagg, M.D., Waurika to be elected Vice-Councilor.

Dr. Garrison stated that it would be necessary to fill the unexpired term of Dr. Ralph Rucker, deceased, Vice-Councilor of District 6 and asked for nominations. W. S. Larrabee, M.D., *moved* the election of P. S. Anderson, M.D., Claremore as Vice-Councilor for District 6. The motion was *seconded* by M. V. Stanley, M.D., Tulsa and *carried*.

The Speaker then called for nominations for Councilor and Vice-Councilor for District No. 8. Dr. J. Hutchings White was recognized and nominated Shade Neely, M.D., Muskogee for Councilor. It was *moved* by E. H. Shuller, M.D., McAlester that the nominations cease and Dr. Neely be elected by *acclamation*. The motion was *seconded* by Finis Ewing, M.D., Muskogee and *carried*. It was *moved* by Dr. Ewing that W. Jackson Sayles, M.D., Miami be re-elected as Vice-Councilor. The motion was *seconded* by Bruce Hinson, M.D., Enid and *carried*.

The Speaker of the House announced that all offices had been filled. He then called upon Paul Champlin, M.D., Enid, out-going President for a few words.

Dr. Champlin stated that it had been a great pleasure to serve the Association as President and expressed his appreciation of the cooperation and help he had received.

Dr. Northcutt was then recognized and said, "I think I know all of those who have been elected and I congratulate you for the deep thinking and actions, as all of these people will serve the State Association well."

C. M. Hodgson, M.D., Kingfisher, was recognized and *moved* that a vote of thanks be given to the Oklahoma County Medical Society for the buffet dinner served to the House of Delegates. The motion was *seconded* by Malcolm Phelps, M.D., El Reno and *carried* unanimously.

The Speaker, Dr. George Garrison, then thanked the House of Delegates for its cooperation in aiding him in the performance of his duties as Speaker. He stated that the problems confronted at this meeting had been serious ones and although there had been some differences of opinion, all matters had been handled to the satisfaction of all members.

Upon *motion* by Finis Ewing, M.D., Muskogee, *seconded* by Bruce Hinson, M.D., Enid, the House of Delegates *adjourned*.

Respectfully submitted,
George H. Garrison, M.D.
Speaker of the House

Reported by: Jane Tucker

DO YOU KNOW?

That a member of the O.S.M.A.—Virginia Curtin, M.D., Watonga—and her family were featured in the "How America Lives" section of the July issue of the Ladies Home Journal? Dr. Curtin's husband is Editor Gerald Curtin of the Watonga Republican and the title of the nine page story on the Curtin family (they have two children) is "The Curtins Knew What They Wanted!"

Dr. Curtin is secretary of the Blaine County Medical Society.

50 and 1

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In 1897 Doctor B. B. Ralph developed methods of treating alcohol and narcotic addiction that, by the standards of the time, were conspicuous for success.

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OFFICERS OF COUNTY SOCIETIES, 1948

COUNTY	PRESIDENT	SECRETARY	MEETING TIME
Alfalfa.....	L. T. Lancaster, Cherokee	C. E. Cook, Cherokee	Last Tues. each Second Month
Atoka-Bryan-Coal- Johnston.....	Charles D. Dale, Atoka	A. T. Baker, Durant	Second Tuesday
Beckham.....	T. J. McGrath, Sayre	J. B. McGolrick, Erick	Third Thursday
Blaine.....	Fred Perry, Okeene	Virginia Curtin, Watonga	Third Thursday
Caddo.....	Joseph Henke, Hydro	Edward T. Cook, Jr., Anadarko	Subject to Call
Canadian.....	J. N. Goldberger, El Reno	Jack W. Myers, El Reno	Second Tuesday
Carter.....	C. D. Cunningham, Ardmore	Roger Reid, Ardmore	First Tuesday
Cherokee.....	P. H. Medearis, Tahlequah	R. K. McIntosh, Jr., Tahlequah	
Choctaw-McCurtain- Pushmataha.....		Fred D. Switzer, Hugo	Fourth Thursday
Cleveland.....	Phil Haddock, Norman	James F. Hohl, Norman	Second Tuesday
Comanche.....	Byron W. Aycock, Lawton	E. Stanley Berger, Lawton	Third Friday
Cotton.....	G. W. Baker, Walters	Mollie Scism, Walters	
Craig.....	C. P. Chumley, Vinita	J. M. McMillan, Vinita	Second Tuesday
Creek.....	P. K. Lewis, Sapulpa	Louis A. Martin, Sapulpa	Third Thursday
Custer.....	J. G. Wood, Weatherford	Edgar A. deMeules, Clinton	Fourth Thursday
Garfield.....	J. Wendell Mercer, Enid	Rosecoe C. Baker, Enid	Wed. before 3rd Thur.
Garvin.....	Carl Steen, Pauls Valley	John R. Callaway, Pauls Valley	
Grant.....	I. V. Hardy, Medford	F. P. Robinson, Pond Creek	
Grady.....	L. E. Woods, Chickasha	Wesley W. Davis, Chickasha	
Greer.....	Fred Sellers, Mangum	J. B. Hollis, Mangum	
Harmon.....	R. H. Lynch, Hollis	C. N. Talley, Hollis	First Wednesday
Haskell.....	William S. Carson, Keota	N. K. William, McCurtain	
Hughes.....	L. A. S. Johnston, Holdenville	Paul Kernek, Holdenville	First Friday
Jackson.....	J. M. Allgood, Altus	J. Harold Abernathy, Altus	Last Monday
Jefferson.....	H. A. Rosier, Waurika	O. J. Hagg, Waurika	Second Monday
Kay-Noble.....	Glenn Kreger, Tonkawa	E. C. Mohler, Ponca City	Second Thursday
Kingfisher.....	H. Violet Sturgeon, Hennessey	Henry C. Trzaska, Hennessey	
Kiowa.....	R. F. Shriner, Hobart	J. B. Tolbert, Mt. View	
LeFlore.....	John H. Harvey, Heavener	Rush L. Wright, Poteau	First Wednesday
Lincoln.....	Jack Mileham, Chandler	C. W. Robertson, Chandler	Last Tuesday
Logan.....	E. W. Lelew, Guthrie	J. L. Lelew, Guthrie	
Mayes.....	E. H. Werling, Pryor	Paul B. Cameron, Pryor	
McClain.....	I. N. Kolb, Blanchard	W. C. McCurdy, Jr., Purcell	
McIntosh.....	J. Howard Baker, Jr., Eufaula	W. A. Tolleson, Eufaula	Third Thursday
Muskogee-Sequoyah- Wagoner.....	George L. Kaiser, Muskogee	Eugene M. Henry, Muskogee	First Tuesday
Northwestern.....	Joe L. Duer, Woodward	C. W. Tedrowe, Woodward	2nd Thurs. Even Mo.
Okfuskee.....	A. S. Melton, Okemah	M. L. Whitney, Okemah	
Oklahoma.....	W. W. Rucks, Jr., Oklahoma City	John F. Kuhn, Oklahoma City	Fourth Tuesday
Okmulgee.....	J. C. Matheney, Okmulgee	Mrs. Muriel Waller, Exec. Secty.	
Osage.....	C. S. Stotts, Pawhuska	S. B. Leslie, Jr., Okmulgee	Second Monday
Ottawa.....	F. L. Wormington, Miami	William A. Loy, Pawhuska	Third Thursday
Payne-Pawnee.....	Clifford M. Bassett, Cushing	W. Jackson Sayles, Miami	Second Thursday
Pittsburg.....	Homer C. Wheeler, McAlester	C. W. Moore, Stillwater	Third Friday
Pontotoc-Murray.....	W. T. Gill, Ada	Edward D. Greenberger, McAlester	First Wednesday
Pottawatomie.....	Jack W. Baxter, Shawnee	Ollie McBride, Ada	1st and 3rd Saturday
Rogers.....	P. S. Anderson, Claremore	F. C. Gallaher, Shawnee	Third Wednesday
Seminole.....	Claude Chambers, Seminole	M. E. Gordon, Claremore	
Stephens.....	Fred Patterson, Duncan	Mack I. Shanholtz, Wewoka	Third Wednesday
Texas.....	Daniel S. Lee, Guymon	W. R. Cheatwood, Duncan	
Tillman.....	G. A. Tallant, Frederick	E. L. Buford, Guymon	
Tulsa.....	Victor K. Allen, Tulsa Medical Arts Bldg.	O. G. Bacon, Frederick	Second and Fourth Monday
Washington-Nowata.....	L. B. Word, Bartlesville	John G. Matt, Tulsa	
Washita.....	A. H. Bungardt, Cordell	Mr. Jack Spears, Exec. Secty.	Second Wednesday
Woods.....	R. A. Whiteneck, Waynoka	C. L. Johnson, Jr., Bartlesville	Last Tuesday
		Aubrey E. Stowers, Sentinel	Odd Months
		W. F. LaFon, Alva	

COUNCILORS AND VICE-COUNCILORS

COUNCILORS AND VICE-COUNCILORS

District No. 1: Alfalfa, Beaver, Cimarron, Dewey, Ellis, Harper, Texas, Woods, Woodward—Daniel B. Ensor, M.D., Hopeton (C) 1950; O. C. Newman, M.D., Shattuck (V-C) 1950.

District No. 2: Beckham, Custer, Greer, Harmon, Jackson, Kiowa, Roger Mills, Tillman, Washita—L. G. Livingston, M.D., Cordell (C) 1951; O. C. Standifer, M.D., Elk City (V-C) 1951.

District No. 3: Garfield, Grant, Kay, Noble, Pawnee, Payne—Bruce Hinson, M.D., Enid (C) 1949; R. W. Choice, M.D., Wakita (V-C) 1949.

District No. 4: Blaine, Canadian, Cleveland, Kingfisher, Logan, Oklahoma—Carroll Pounders, M.D., Oklahoma City (C) 1950; Joe Phelps, M.D., El Reno (V-C) 1950.

District No. 5: Caddo, Carter, Comanche, Cotton, Grady, Jefferson, Love, Stephens—J. Hobson Veazey, M.D., Ardmore (C) 1951; O. J. Hagg, M.D., Waurika (V-C) 1951.

District No. 6: Creek, Nowata, Osage, Rogers, Tulsa, Washington—Ralph McGill, M.D., Tulsa (C) 1949; P. S. Anderson, M.D., Claremore (V-C) 1951.

District No. 7: Garvin, Hughes, Lincoln, McClain, Murray, Okfuskee, Pontotoc, Pottawatomie, Seminole—Clinton Gallaher, M.D., Shawnee (C) 1950; Ned Burleson, M.D., Prague (V-C) 1950.

District No. 8: Adair, Cherokee, Craig, Delaware, Mayes, Muskogee, Okmulgee, Ottawa, Sequoyah, Wagoner—Shade Neely, M.D., Muskogee (C) 1951; W. J. Sayles, M.D., Miami (V-C) 1951.

District No. 9: Haskell, Latimer, LeFlore, McIntosh, Pittsburg—Earl Woodson, M.D., Poteau (C) 1949; E. H. Shuller, M.D., McAlester (V-C) 1949.

District No. 10: Atoka, Bryan, Choctaw, Coal, Johnston, Marshall, McCurtain, Pushmataha—W. K. Haynie, M.D., Durant (C) 1950; W. W. Cotton, M.D., Atoka (V-C) 1950.

THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

A VERSATILE TRIUMVIRATE

The Journal's Editorial Board recently convened to attend to important business which will be announced in the Journal in due time. Incidentally, the senior member arranged an unearned leave of absence, while the junior member takes over with a masterly grasp wholly justified by former editorial responsibilities skillfully negotiated.

The "middle man" on the Board having had longtime similar editorial experience, hops off for Holy Ghost Canyon, New Mexico, piloting his own plane. His grandfather patiently followed the mules; his father, the writer's good friend now deceased, puttered around in a two cylinder car which backfired a little louder than the mules, moved a bit faster and displayed much less judgment. Now the worthy descendant of these hardy progenitors defies the clouds, clutters up the sky with his fumes, and sends the mama bears scurrying to their caves, where with an anxiety complex they suck their paws in lieu of the biped's garbage. At any cost the "middle man" must get back to his log cabin in the wilds.

The writer once traveled to Holy Ghost Canyon where he was met at the nearest side track and eagerly kissed by a beautiful angel in a station wagon. He thought that was celestial, but the son of his old friend goes to heaven on the way out and thinks nothing of it. Now that we have overcome gravity, we wonder how fast the immortals are moving when they pass the pearly gates, and likewise we wonder what kind of a strong net Pluto employs to break the fall when the lost sinners come crashing down. The Journal is safe. In case of an emergency, the "middle man" can fly back in a jiffy.

STREPHOSYMBOLIA

A delay or difficulty in learning to read which is out of harmony with a child's general intellectual ability. At the outset it is characterized by confusion between similarly formed but oppositely oriented letters, and a tendency to a changing order of direction in reading.¹

Perhaps your child, grandchild, niece, nephew, neighbors' child, or small patient has had a specific reading or language disability and was thought to be just lazy or not to try. The problem has become more acute since the introduction of *sight reading* and it is estimated that 10 per cent of boys and one per cent of girls have such a disability. The lay press is presenting the problem.² More communities are becoming conscious of it. The Oklahoma City Times carried a story some months ago that Midwest City planned to send a teacher away to study remedial training of pupils with such disabilities.

It is postulated that such a child has difficulty in developing a dominant brain side. He is often ambidextrous or writes with the right hand and has a dominant left eye or vice versa. The image that he sees or the word that he sees will be stored in part on one side of the brain and in part as the mirror image on the other. When he recalls the word to write it or spell it *was* becomes *saw*, *on* becomes *no* or *chocolate* becomes *choachlet*. The amazing thing is that he cannot see anything wrong. Reading becomes most difficult for often the words mean absolutely nothing or something entirely different. He may start to spell a word from left to right and finish up from right to left with a bizarre result.

Frequently these children are excellent in arithmetic until they got far enough along that the problems are written and then their original difficulty makes it impossible for them to interpret the problem. Gillingham and Stillman³ mention several instances in which men with specific reading disabilities become excellent engineers or architects and never learned how to read. Often their mothers read to them until they got married and then their wives took over the task.

This brings up another mistaken notion; that children who are poor readers should not be read to but be made to read. These authors point out that this attitude deprives the child of a wealth of mental experience and knowledge that he might otherwise have.

There are a few simple things that will help one suspect that a child is in this category if the physician is aware of its existence. One may determine the handedness by having a child, while blindfolded, write on a blackboard with both hands simultaneously the digits. If he is right-handed he will write the mirror image with his left. If he has been changed from left to right at an early age an expert would need to decide the advisability of changing him back. One may determine eyedness by having him sight on an object with both eyes open and see which he uses. If he is otherwise intelligent but has trouble with reading and spelling, and particularly if other members of the family have similar trouble, one should suspect a specific disability. The spelling of a few words, the description of a scene and the making of a few sentences all in writing, may offer a clue. The remedial training is not up to the physician but it often falls his lot to advise parents who are hopelessly involved with a boy over his school work. Let's give the lazy reader a chance.

1. Orton, S. T.: Reading, Writing and Speech Problems in Children. W. W. Norton & Co., N. Y., 1937.

2. Gallagher, J. R.: Can't Spell, Can't Read. The Atlantic, June 1948.

3. Gillingham, Anne and Stillman, Bessie W.: Remedial Training for Children with Specific Disability in Reading, Spelling and Penmanship. Part I. Published by the authors and distributed by Anna Gillingham, 25 Parkview Ave., Bronxville 8, N. Y.

B. C. G.

The preliminary work necessary to establish B.C.G. (*Bacillus of Calmette and Guérin*) as an extremely useful tool in our armamentarium has been the subject of previous editorial comment.¹ Vaccination has been proved to be a sound public health measure. The practitioner, particularly he whose practice includes children, must adapt the procedure to the individual problem.

Just after the turn of the century Calmette and Guérin began working with a bovine tubercle bacillus. The intestine of the newborn infant being permeable to larger particles than at a later date, they hoped to develop an attenuated bacillus which could be fed to new born babies, thus permitting them to develop their own protection. The virulence of the organism was reduced by regular transfers on a bile potato medium over a period of 13 years.

Norwegian workers observed the high incidence of active tuberculosis in nurses who were tuberculin negative when they were exposed during their course of training to

tuberculosis. In contrast to this there was a low incidence among girls who were tuberculin positive on entertaining training. Whether a first infection tuberculosis well handled by the individual is a future hazard or offers protection is a moot question. It is agreed, however, that first infection in a young adult is anything but desirable.

In an excellently planned, controlled and executed study reported by Rosenthal, Leslie and Loewinsohn,² the conclusion is warranted that vaccination with B.C.G. is most valuable. In 2831 new born infants living in the poorest districts of Chicago, but not in household contact with tuberculosis, the rate per thousand person years was 3.31 times as great in the controls as in the vaccinated. There was one death from tuberculosis in the vaccinated against seven in the controls.

In 1,159 siblings the tuberculosis rate per 1000 person-years was 5.29 times as great in the controls as in the vaccinated.

"Considering the noncontact and contact groups as a whole, there were 13 cases of tuberculosis with one death in the vaccinated group as compared to 44 cases of tuberculosis with 11 deaths in the controls.

"By the use of the multiple puncture method, practically all complications were avoided; tuberculin reaction conversion was rapid (within one month) and universal.

"A positive tuberculin reaction following a single vaccination was present in 92.6 per cent after three and one-half to four years and 79.85 per cent after six to six and one-half years in children vaccinated at birth and 88.6 per cent in student nurses at the end of their training, three years after vaccination."

1. Editorial. J. Okla. State Med. Assn. 41:2 (Jan.) 1948.

2. Rosenthal, S. R.; Leslie, E. L.; Loewinsohn, E.: B.C.G. Vaccination in All Age Groups. J.A.M.A. 136:73 (Jan. 10) 1948.

DO YOU KNOW?

That plans are already being formulated for next year's Annual Meeting of the State Medical Association? Representatives from the executive office, Dick Graham, executive secretary, and John K. Hart, associate executive secretary, recently held a conference in Tulsa with Jack Spears, executive secretary of the Tulsa County Society, Homer Ruprecht, M.D., head of the scientific work committee, and J. E. McDonald, M.D., president-elect of the Tulsa society, to map out preliminary details for the annual session scheduled for May 15-19, 1949, Mayo Hotel, Tulsa.

SCIENTIFIC ARTICLES

VAGINAL HYSTERECTOMY*

F. D. SINCLAIR, M.D.

TULSA, OKLAHOMA

Medical progress in modern times advances with such rapid strides that reports of new, more intricate and daring surgical procedures recorded in the professional, as well as the lay press, may overshadow older and more thoroughly proven operations such as vaginal hysterectomy. This operation in its long history has undergone repeated fluctuations in popularity, but currently is generally experiencing a moderate return to favor. As might be expected, some confusion exists over claims of priority since this major surgical procedure was first accomplished centuries before even the elementary principles of asepsis were suspected. Soranus, a Greek obstetrician practicing in Alexandria in the second century, deserves credit for the original idea of surgically removing the uterus through the vagina, though Berengarius, of Bologna, in 1507 is author of the first authenticated description extant in the world medical literature.

The present paper has as its sole purpose the presentation to this association of pertinent facts in the hope of creating more wide-spread interest in this valuable operation.

Concerning this statement alone, recent opinions widely differ. The late Joseph Price of Philadelphia stated, "Vaginal hysterectomy clamp method has the broadest field of usefulness of any pelvic operation; it has the lowest operative mortality of any major surgical procedure and has the best post-operative history of any operation in my experience." (This experience represents several thousand cases.) During the past decade similar opinions by numerous authors are repeatedly recorded including Heaney, Danforth, Emmert, Dannreuther, Averett, Smith, Miller, Falk and Campbell. On the other hand, many equally prominent authorities state that the vaginal operation has no advantages over the properly executed abdominal hysterectomy. In fact, even today many well-recognized medical schools and

hospitals make no use of this operation in their postgraduate surgical or gynecological resident training. Despite this situation, medical reports in recent years — several recording series of two to three thousand case histories — do attest a current growing popularity for hysterectomy by the vaginal route.

To attain this position with a background of many years experience in the hands of many operators, should indicate certain inherent advantages in vaginal hysterectomy. The Presbyterian Hospital group in Chicago have presented a series of 2,798 operations with a critical analysis. The Price Hospital Group in Philadelphia report by monograph approximately twice that many cases with more general deductions. Many others report smaller series in the hundreds. These authors collectively present very convincing statistics. Any surgical procedure must be judged on a basis of safety, especially hysterectomy, for when indicated it is seldom an emergency or immediately a life-saving operation. Collected mortality statistics show a 2.4 per cent death rate for abdominal hysterectomy, both total and subtotal (41,485 cases), with a .32 per cent mortality rate for vaginal hysterectomy (7,280 cases). Simply, then, these figures indicate the abdominal operation carries seven times the risk of the vaginal operation.

Wherein lies the difference? These patients are not only far more comfortable in the immediate postoperative course and become active more quickly, but they are remarkably freer from the major complications. Thrombophlebitis and phlebothrombosis are much less common than after abdominal operative section, so that fatal pulmonary embolus is rare. Atelectasis and other pulmonary complications are less frequently encountered, explained partly, at least, by the fact that abdominal respiratory excursions continue unhampered.

Since the intestines are seldom handled or packed aside, the danger of postoperative adhesions with or without intestinal obstruction is minimized.

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association, May 18, 1948.

To continue this discussion of the advantages of the vaginal hysterectomy, first, from the pathological standpoint, vaginal removal of uterus always means complete removal together with the cervix. The literature reports many series of cases of carcinoma in the stump following incomplete hysterectomy. The incidence varies, but in 6,668 collected cases of carcinoma of the cervix uteri, 3.4 per cent were found in the remaining cervical stump. Secondly, there is the surgical advantage that the uterus can be removed, together with any indicated repair of cystocele, urethrocele, rectocele, or enterocele, at one time and with a single approach. Thirdly, there is a definite advantage for the patient who is a substandard surgical risk, particularly the aged and obese. Some authorities reserve the vaginal approach only for these patients, but if vaginal hysterectomy can be performed in such poor risks with success, why is it not preferable for good risk patients with appropriate pathology?

What type of pelvic pathology then is best suited for this operation? Typically, it is the parous women near or beyond 40 who may have menorrhagia and/or several of the following pathological conditions: extensive chronic disease of the cervix, myoma uteri, fibrosis uteri, descensus uteri of any degree, retroversion uteri, stress incontinence, cystocele or rectocele with associated symptoms. In many such women previously the menorrhagia has been treated with radiation and the other lesions disregarded for the time. Many gynecologists report a definite trend away from radium treatment for otherwise uncontrollable bleeding at the menopause. Averett echoes the opinions of many when he states, "—in treatment of hemorrhagic conditions of uterus in middle aged women, the mortality rate of vaginal hysterectomy is as low as that of radium without the sequelae and relapses, furthermore possible early malignant conditions are readily disclosed and eliminated." Statistical studies of Corscaden and Gusberg and Randall show that patients who have had menopausal functional bleeding have three and one-half times as great a chance as other women of developing adenocarcinoma in later life.

There are occasionally cases of menopausal bleeding when the microscopic picture of the curetted endometrium shows an atypical hyperplasia as described recently by Novak. Even competent pathologists render different interpretations in these cases, and certainly in the doubtful malignant situation,

the uterus is best removed, particularly when the operative risk to the patient can be minimal.

Some reports are reaching the literature recording malignancy of the uterus several years after radium treatment for benign menopausal uterine hemorrhage. Recent personal experience with several cases of this nature has stimulated further thought and investigation of a more complete and satisfactory program for these women. The answer presented herewith to this association may seem too radical at first consideration, but it is sound prophylaxis with an ultimate greater salvage.

Contraindications to vaginal hysterectomy include large tumors, either uterine or ovarian in origin, and more particularly any case where the pelvic structures are fixed by pathological process or previous surgery are best handled by the abdominal approach.

In reviewing this large series of reported hysterectomies by all methods, in private practice, it would seem fair to state that on the average 20-35 per cent should be accomplished by the vaginal route. As Danforth has previously stated, "—the operator should be able to remove the uterus either abdominally or vaginally with sufficient ease that his choice of operation is not influenced with lack of experience with one or the other."

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ECTOPIC PREGNANCY*

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Since death from obstetrical hemorrhage is still one of the major causes of maternal mortality in the United States, and as Falls¹ reported, in 1938, that extra-uterine pregnancy was the ninth largest cause of death in this country, I feel that the subject is one which should be reviewed again and again and constantly kept before our minds. As Gordon² so very well put it "a broad stream of blood flows through the statistics of maternal mortality and morbidity."

Ectopic pregnancy occurs, according to Titus,³ about once in 300 pregnancies. Crossen and Crossen⁴ state that this accounts for about two per cent of all gynecological operations. Schumann⁵ wrote in his excellent monograph over 25 years ago, "The history of the recognition of pregnancy proceeding outside of the uterine cavity, the understanding of its gravity and development of modern methods of treatment forms one of the most fascinating episodes in that epitome of human intellect, the history of medicine."

ETIOLOGY

The theories concerning the causes of ectopic pregnancy are partly speculative, although much information has been gained through pathologic and experimental studies.

The most commonly accepted causes of ectopic pregnancy are: (1) changes in the mucosa of the Fallopian tubes resulting from inflammatory disease; (2) developmental anomalies such as diverticula and blind accessory pouches; (3) advanced development of the fertilized ovum and over-readiness for implantation due to external migration or wandering from one ovary to the opposite tube; (4) obstruction to the passage of the ovum by convolutions, adhesions or tumors of the tube.

Several of these factors are consistent with the fact that many of these patients have been sterile for years.

I should like to discuss briefly these four theories just mentioned. First, infection of the tubes in inflammatory disease may glue the longitudinal folds at various points so that wedges or funnel-shaped blind channels form and the ovum migrate into them. Allen⁶

of Chicago has recently published a monograph on this subject and thinks that pelvic inflammation should not be accused of being the cause of ectopic pregnancy so often as generally accepted and presents very conclusive evidence to support his thought. He also states that endometriosis and defects in metabolism should be given more thought and research.

Second, diverticula and accessory pouches of developmental origin have been demonstrated by many.

Third, Williams⁷ says, "In a considerable number of cases which I have examined, the corpus luteum was situated not in the ovary corresponding to the pregnant tube, but in the opposite one, indicating that external migration had occurred, and that the fertilized ovum had made the transit of the pelvic cavity. The fertilized ovum may attain such proportions during its migration as to interfere with its passage through the tube.

Fourth, convolutions of the tube may be infantile in type or there may be actual angulations due to adhesions. These latter are thought to be sequelae of pelvic infection.

PATHOLOGY

Nidation of the ovum at various points along the tube follows practically the same mechanism as that within the uterus except that it lacks the richly vascular decidua into which it can burrow so quickly for shelter and nourishment. In the tube it erodes through the mucosa into the muscularis. A pseudocapsularis is thrown over it presently, bleeding and clotting occur within the space occupied by the ovum, and its growth begins. If the ovum lodges in the uterine end of the tube, where the lumen is more narrow and the plications are not so deep, limited distention is possible. Therefore, the ovum dies rather promptly or it may rupture and tear through the surrounding tissues early, even before the existence of a pregnancy is thought of by the patient.

If in the interstitial portion pregnancy may develop for several weeks or even months before rupture because the muscle fibers of the uterine horn hypertrophy and stretch in imitation of their habit in normal intra-uterine pregnancy. However when

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association, May 18, 1948.

rupture does occur, the condition takes on the aspects of a ruptured uterus with severe hemorrhage and shock.

In the distal end of the tube the distensibility is very great and the ovum may burrow within the plications and grow for weeks and weeks. These patients may have symptoms from time to time but the symptoms of rupture do not occur until late.

The rupture usually occurs directly into the peritoneal cavity, but occasionally it may burst into the space between the folds of the broad ligament, so that a hematoma is formed and confined, this broad ligament hematoma may be absorbed, and occasionally, if the embryo is not dead before rupture, an abdominal pregnancy develops at this site.

Titus states "A certain proportion of the ampullar pregnancies and many of those in the fimbriated end of the tube end as tubal abortions." In such cases, the pseudocapsular ruptures from tension, this being weaker than the more distensible walls of the tube at these sites; hemorrhage dislodges the ovum from its bed and forces it out toward or even through the fimbriated end into the peritoneal cavity where it is absorbed.

A tubal pregnancy may exist in combination with a normally located intra-uterine pregnancy; there may be a pregnancy in each tube at the same time; and twin pregnancies occurring in the same tube have been described.

I shall not attempt to discuss true ovarian pregnancy or abdominal pregnancy in this short space of time allotted in that they are extremely rare. Whittenburg⁸ of Detroit in the April issue of the American Journal of Surgery in reporting a primary ovarian pregnancy reviewed the literature and found only a total of 81 reported authentic cases.

SYMPTOMS AND DIAGNOSIS

Tubal pregnancy even before rupture or abortion is no longer an unusual condition to recognize. The usual history is that the patient has missed one menstrual period and irregular bleeding or spotting begins to occur, or that the period seemed to be delayed, beginning a few days after its expected time as scanty, irregular bleeding which may have been prolonged over several days.

Pain is usually noted early. Usually there are fleeting pains described as sharp, stabbing or tearing in one side rather than a constant dull ache. These attacks of pain, as a rule, become more frequent and more severe as time goes on and the pregnancy advances and after a while may be directly

associated with each appearance of vaginal bleeding. Pain referred to the shoulder is quite common. Moving the cervix as by examination or by coitus is distinctly painful, and this is a fairly characteristic sign of tubal irritation.

Examination in the early stages does not always give conclusive information. However, we may look for bluing of the vaginal mucosa, softening of the cervix, and enlargement of the fundus approximating that of a premenstrual state, or occasionally there may be colostrum in the breasts. The Friedman or the Aschheim-Zondek tests should be resorted to in order to determine the actual existence of a pregnancy. The conditions most often confused with ectopic pregnancy are: threatened abortion of an intra-uterine pregnancy, pelvic inflammatory disease, or small ovarian cysts.

Rupture of the tube more often occurs with some type of traumatism such as coitus, the lifting of a window or a piece of furniture, or a bimanual examination. But it may occur without warning while the patient is quiet or even asleep. I am sure most of us have had the unpleasant experience of a tubal pregnancy being ruptured by a bimanual examination. In one of my cases this very thing happened. The patient, very soon after examination, complained of feeling fainty and of severe pain. She was removed to the hospital and upon opening the abdomen, a spurting point was immediately visible in the edge of the ruptured point in the tube, the blood was fresh with only a few clots, and a normal-appearing tiny embryo was presently found nearby. It was quite apparent that rupture had occurred during the bimanual examination. Therefore, all pelvic examinations of such patients must be done with great caution, and the utmost care must be taken to avoid rupturing the sac by the exertion of even slight pressure or force. It would, of course, be better to remove these patients to the hospital before any such examination is made.

We are all familiar with the classical signs of ruptured tubal pregnancy as the severe stabbing or tearing pain in the affected side with faintness and dizziness or actual syncope. These indicate that the tube has ruptured or that intratubal rupture of the capsule with hemorrhage and abortion has occurred either into the lumen of the tube, or out through its end into the pelvic cavity. Various degrees of shock appear, and this is often out of proportion to the amount of hemorrhage, either external or intra-abdomi-

nal. Shock and collapse become progressively more profound; the pulse becomes rapid and thready, the blood pressure falls alarmingly, the lips and other mucous membranes show a striking pallor, and the blood count is characteristic of an acute and severe secondary anemia. Death may follow if a larger artery is torn, but usually the lowering of blood pressure goes on so rapidly that hemorrhage is checked thereby and clotting occurs, whereupon the patient may have an episode from which she seems to be much better.

A few years ago I ran across an article in the *Journal of Urology and Cutaneous Review* in which an author stated that these classical symptoms indicating shock should be looked upon as not symptoms of shock but symptoms of impending death.

After the free blood has had time to clot, the pelvic mass which it forms is readily palpable, being felt in the cul de sac and being prominent on the affected side. The uterus is often displaced by the mass.

The Aschheim-Zondek test for pregnancy should be made as soon as possible and while waiting for the result of this test, regularly repeated blood counts should be made for comparison with each other. We should expect diminution of the red corpuscles and of the hemoglobin. In the earlier stages the leucocytes counts may be normal even in the presence of fever, which is due to peritoneal irritation from the free blood in the abdominal cavity. In a short time the leucocyte count begins to increase due to the continued peritoneal absorption so this is an important point of differentiation if counts are made early and repeated a number of times.

The sedimentation rate may follow the same lines as the white count, early it may not show much change but after a while becomes more and more rapid so that it begins to resemble that of an infection. Most of these cases run a low grade fever.

If, after a careful history and physical examination the results are not conclusive or if unexplained pain or palpation of a mass indicate additional pathology in the adenexia, opening of the posterior cul de sac protects the patient without materially increasing her risks or time of hospitalization.

Allen, Greenhill and the late Dr. DeLee⁹ of Chicago are all advocates of this procedure. Allen states "we are convinced that the routine use of posterior colpotomy in all cases of extra-uterine pregnancy, except those which are gravely ill, will materially

reduce the serious delays in diagnosis and treatment as well as increase the number of cases in whom vaginal removal of the affected tube or ovary can be undertaken." They believe that colpotomy should be given a much more important role as a diagnostic procedure as well as a simple avenue of approach to early extra-uterine pregnancy.

TREATMENT

Titus says, "Expectant treatment, or watchful waiting, in an ectopic pregnancy at any stage is extremely dangerous, as the sac may rupture at any moment and the patient die from the ensuing hemorrhage." He also empirically states that if any doubt exists as to the correctness of the diagnosis and the patient's condition is at all serious, a laparotomy should be done with precisely as much assurance as though the diagnosis were an established fact.

There has been considerable controversy as to the time of operation of these cases but as Allen states "It seems to me the opportune time is as soon as the diagnosis is made; chiefly because the primary cause of death is hemorrhage." If shock is present or on the horizon supportive measures could be well underway before the surgical preparation of the patient can be completed.

Perhaps it is not best to operate at the very height of the first shock, when the patient's blood pressure is low, her pulse rapid, and symptoms of distress very pronounced. But fortunately with the modern use of plasma, which may be started beforehand, the operation might be started in a very short time. The anesthesia, in these cases, should be the simplest. This is, perhaps, open drop ether or ether with a high concentration of oxygen. H. Hudnall Ware, Jr.¹⁰ of Richmond, Virginia, states that oxygen given pre-operatively, during the operation, and post-operatively is extremely valuable in treating these patients. Of course whole blood, when it is available, constitutes the backbone of modern therapy. Even in our small hospitals blood can be obtained in a short time.

Many modern operators make a plea for very conservative surgery even to the point of conserving a portion of the affected tube. This is particularly true if the ovum has become implanted in the fimbriated end of the tube. This, also, applies to the opposite tube even if it is somewhat diseased, since modern plastic surgery might be done later. The old opinion held by some that the opposite tube should be removed, since a recurrence of this condition could occur there, I feel has gone

by the board. Certainly no other operative procedures should be undertaken at the time of operation unless the patient is in extremely good condition.

In conclusion, let us be particularly aware of this condition so that more of these patients may be salvaged and our mortality and morbidity rates be further lowered.

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INJURIES OF THE URETHRA, THEIR DIAGNOSIS AND CARE*

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In considering the diagnosis and treatment of urethral injuries, it is essential that we briefly review the anatomy of the urethra. In doing so, we realize that the urethra lies on the ventral surface of penis, that it is surrounded by a vascular body known as the corpus spongiosum and that, for practical purposes, there is little between the urethra and the skin on its ventral surface. Dorsal to the urethra on both sides we find the large vascular corpora cavernosa. These are encased in a tough capsule of fibrous elastic tissue known as the tunica albuginea of the corpora.

Surrounding the urethra and the corpora is a dense fascial envelope known as Buck's fascia. This extends from the glans penis which is merely an expansion of the corpus spongiosum back to the bulbous portion of the urethra. There it thins out considerably and becomes almost unrecognizable. Between Buck's fascia and the skin is another well-developed layer of connective tissue known as Colles' fascia. This extends up over the abdomen, it surrounds the scrotal contents and eventually fuses with the inferior layer of the urogenital diaphragm below.

The urogenital diaphragm (triangular ligament) stretches across the pubic arch and divides the urethra into the anterior and the posterior or prostatic urethra while that portion which lies between the leaves of the urogenital diaphragm is known as the membranous urethra. The urogenital diaphragm is such a dense, well-developed structure that, for practical purposes, urethral extravasa-

tions remain either below or above it. Consequently, a hematoma or an extravasation resulting from an injury to the anterior urethra whether it involves the bulbous or pendulous portion of the urethra will be seen as a swelling in the perineum or along the shaft or the penis or may extend up over the anterior abdominal wall. On the other hand an extravasation resulting from an injury to the urethra above the urogenital diaphragm will not be visible externally but may actually extend along the lumbar gutters to reach and surround the kidneys.

As a result of the nature of the corpus spongiosum, it is fairly obvious that injury to the urethra, either from within or without, must also injure this spongy vascular structure. The cardinal evidence of injury to the urethra therefore is bleeding from the end of the penis. Any swelling is usually a hematoma as it is unusual for urine to be extravasated. In actual fact it is far more common for a patient with an urethral injury to have acute retention of urine rather than urinary extravasation.

The urethra is most commonly injured by the physician. Often this is done intentionally although occasionally it may be done by accident. The accidental injury is usually a result of disease of the urethra or prostate. It is very easy to perforate the urethra in the presence of a carcinoma. It is not difficult to perforate the urethra in the presence of a stricture, with its chronic suppuration, and it is extremely common to pass a catheter or sound through an enlarged prostate; particularly an enlarged sub-cervical lobe. These

*Presented before the General Session at the Annual Meeting of the Oklahoma State Medical Association, May 19, 1948.

injuries when recognized are easily cared for and always evidenced by bleeding from the end of the urethra.

As an illustration: the method of attempting to correct a urethral stricture is by a process which we euphemistically call "urethral dilatation" but which in actual fact is urethral "laceration." The stricture, being composed primarily of scar tissue, can only be dilated by tearing the scar apart. An alternate method of correcting the stricture is by the operation known as an "internal urethotomy." As most of you know, the incision for this purpose is made in the mid-line on the dorsal side of the urethra. This is done for several reasons. The chief of which is, as you will recall from your anatomy, that the tunica albuginea which surrounds the corpora cavernosa is composed of elastic connective tissue and can readily be incised without much harm whereas if the incision were made on the ventral surface, extravasation and even a urethral fistula may follow.

Because of the pendulous portion of the urethra is partially surrounded by the elastic fibers of the tunica albuginea and corpora cavernosa, a stricture in this area is usually elastic and consequently very difficult to dilate with the hope that it will remain dilated. Consequently, incision of these elastic fibers with a urethrotome and then keeping the incision open until the cut area has become epithelialized is by far the most satisfactory way of caring for these strictures.

In the bulbous urethra where the corpora cavernosa have become separated and where normal connective tissue surrounds the urethra, gradual dilatation with sounds gives more permanent and lasting results for here we attempt to tear the connective tissue fibers in the hopes that eventually the scar will remain healed without further contraction.

When we intentionally lacerate (dilate) the urethra in an attempt to cure a stricture, we must constantly bear in mind that this must be done gradually so that only minimal injury is done each time. The result of excessive trauma may be even greater scar formation in which case the new stricture may be worse than the one with which we started. Within the past two years, I have seen in consultation a number of patients in whom excessive trauma at the time of urethral manipulation, caused injury to one or other of the corpora cavernosa with a resulting crippling deformity of the penis at the time of erection. It must be emphasized that

although the tunica albuginea of the corpora usually protects these structures from trauma, we must be careful in doing an internal urethrotomy, that the incision is kept in the mid-line so as not to break through into one or other of the corpora. Excessive dilatation (laceration) of a narrow urethra to permit the passage of a No. 28 Resectoscope followed by the wearing of a large inlying urethral catheter is probably responsible for more urethral strictures than gonorrhea used to be.

The penile portion of the urethra is the least common site of accidental injury except from gunshot wounds, deliberate mutilation or occasional crushing against the pubis. The injuries from without are, as a rule, more disabling and result in a much greater morbidity. Gunshot wounds, not infrequently, perforate the urethra. If this takes place on the ventral surface of the penis, a urethral fistula must result unless immediate repair is undertaken. Even then it is not uncommon for a fistula to follow because the epithelium lining both the skin and the urethra rapidly line the fistulous tract and so prevents it from healing.

Injuries to the bulbous portion of the urethra are most commonly the accompaniment of a straddle injury at which time the urethra is lacerated by being caught between the pubis and the object straddled. In the region of the bulb, Buck's fascia is only a thinned-out layer and the corpus spongiosum is a well-developed vascular structure only protected by the bulbo-cavernosus, consequently a hematoma readily forms. This is usually manifested just below the scrotum. Not uncommonly in this type of accident the urethra is completely torn in two. If this happens then the laceration or rupture of the urethra usually takes place below the inferior layer of the urogenital diaphragm.

When the urethra has been completely torn across, immediate suture and approximation of the torn ends gives the best results. For hemorrhage can be controlled at this time and consequently the tendency to scar formation minimized. It used to be felt that diversion of the urinary stream was essential to the healing of this type of repair but I have found that if the repair is properly done over a large catheter or sound under aseptic conditions, if the urine is not infected and if the patient is given ample antibiotics, these repairs will not break down provided no catheter is left in place to cause suppuration and provided erections do not take place. This, as

I have shown, can be controlled in the majority of instances by the use of large doses of estrogens.

The urethral injury which, unless properly managed, causes the most prolonged disability is that of complete rupture of the urethra at the apex of the prostate as a result of a fractured pelvis or of subluxation of the symphysis pubis. It is reported that about 10 per cent of crushing injuries which result in a fractured pelvis are associated with a ruptured urethra. In my experience, it is rare that these ruptures take place at any place other than the urogenital diaphragm when one considers the anatomical relations of these parts, it is very obvious why this should be.

In the patient who has sustained an injury of this type, the greatest difficulty has always been to make a differential diagnosis between a laceration of the urethra, laceration of the bladder (either extra or intra-peritoneal) and complete rupture of the urethra. As rupture of the urethra associated with fracture of the pelvis demands immediate surgery, the diagnosis is of the utmost importance. Here again, blood coming from the end of the urethra indicates urethral injury. Strangely enough, only a minimal amount of blood may indicate very extensive injury whereas a large amount of bleeding would suggest that the injury is merely a laceration and that this laceration has not penetrated the deeper structures to permit extravasation of the bleeding. If the urethra has been completely divided at the apex of the prostate this can, as I have shown in my article,¹ be readily determined on careful rectal palpation. The prostate may be found missing from its normal position and in its place will be found a large boggy mass. This is probably a hematoma for although voiding into the tissues through a ruptured urethra does sometimes occur, in my experience it is extremely uncommon. If, on the other hand, the prostate can be located and can readily be pushed upward this would also indicate that it has been severed from its attachment to the membranous urethra. With these findings further examination is unnecessary for immediate operation is indicated.

In the majority of instances the patient will also complain of his inability to urinate. If he has a desire to urinate and he is unable to, we can be almost certain that he has a rupture of the urethra with reflex spasm of his vesical sphincter and that the bladder has not been injured. Consequently, it would be very unwise to attempt to catheterize him.

If on the other hand he has no urethral bleeding and the prostate can be felt in its normal position and cannot be displaced by the examining finger and despite an adequate fluid intake he has no desire to urinate, we may assume that unless he has an anuria he, in all probability, has a ruptured bladder and the urethra is intact. In the presence of an intact urethra, cystoscopic examination will give us very accurate information regarding the bladder.

In the past, it has been commonly taught that an attempt should be made to catheterize the patient's bladder in the hope of making a differential diagnosis when the question of a ruptured bladder or urethra is considered in an injury of this type. Unfortunately, misinformation is too frequently obtained by this procedure. After successfully catheterizing the bladder and drawing off a moderate amount of blood tinged urine, I have seen 150 cc. of fluid instilled into a bladder and 150 cc. withdrawn. Subsequently, on cystoscopic examination, I have found an extensive laceration of the bladder through which at operation two fingers could be readily passed. If on the other hand, a catheter cannot be passed through the urethra into the bladder (we do not know whether the patient has an old urethral structure, a spasm of his sphincter or whether the catheter has passed through the urethra into the surrounding tissue. Therefore, in an individual who has had a crushing injury of his pelvis I can see no need for attempting catheterization when an intelligently done rectal examination will give more information. If for scientific reasons or otherwise we want some positive information regarding injury to the urethra, this may be obtained by doing a urethrogram but even this procedure is seldom necessary.

The repair of a ruptured urethra associated with a fracture of the pelvis should consist of more than just a suprapubic cystostomy with the intention that at some later date, arbitrarily six weeks, the torn ends of the urethra can be found and anastomosed. This is an extremely difficult procedure.

Whenever I have attempted to do a repair of this type, I have always found an excessive amount of scar tissue present and it has been extremely difficult and sometimes well nigh impossible to mobilize the prostate in order to resuture adequately the torn ends of the urethra. It has been customary in these circumstances to leave a catheter inlying in the urethra for a period of weeks

until the entire tract has become epithelialized. Even after this, it is necessary for the patient to have urethral dilatations for most of the rest of his life. For that part of the urethra where the normal structures are missing will always be surrounded by dense scar tissue which will continue to contract.

Some 15 years ago, when I was urological consultant to the Chamber of Mines in South Africa, I had the opportunity of seeing and treating many of these crushing injuries. At that time, I improvised a method of pulling the prostate down into its normal position. I fastened a crosspiece on my inlying catheter. This worked reasonably satisfactorily but it was only after the Foley balloon catheter was invented that we had an adequate instrument for approximating the torn ends of the urethra. Since then I have always made it a practice to pass a Foley balloon catheter through the urethra into the bladder at the time of the suprapubic cystostomy and exploration and to make traction on the

catheter in order to approximate the divided ends of the urethra. The traction is usually maintained for a period of 10 days to two weeks. The result of this practice has been that it has seldom been necessary, even after prolonged follow-up, to dilate the patient's urethra for strictures rarely form. The hematoma from the torn peri-prostatic veins is usually adequately drained and there is no separation of the torn ends of the urethra to be filled in by an epithelialized tract of scar tissue.

Since the introduction of the retropubic approach to the prostate by Terence Millin of London, I feel sure that even the use of the Foley balloon catheter may become obsolete for Millin has shown that just two or three sutures will hold a prostate in position adjacent to the urogenital diaphragm so that primary healing of the urethra will take place without scar formation.

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The Association of High Blood Pressure, and Increased Pulse Rate As a Manifestation of Hyperglycemia in Chronic Eye, Ear, Nose and Throat Conditions*

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Patients with hyperglycemia do not always show a glycosuria, because of a high renal threshold, which prevents the sugar being passed from the blood into the urine. This repeated retention produces headaches, photophobia, lacrimation, dizziness, increased post nasal discharge, paraesthesias, generalized fatigue, transient scotomata and diplopia, which may progress to nausea and vomiting.

Their symptoms make it easy for these cases to be mistaken for Meniere's syndrome, "sinus trouble," "loss of equilibrium," and allergic manifestations for these are the labels with which they usually come, in their further search for relief.

Most of these cases have negative urinalyses, and normal fasting blood sugars, so it is not difficult to see how the hyperglycemia has been missed. It is with the two hour

Exton-Rose glucose tolerance that the hyperglycemic curve is found. The one hour curve frequently leaves the blood sugar elevated, while the four and five hour glucose tolerance tests become boresome to the patient, therefore, we use the two hour test which usually gives all the information desired.

These hyperglycemic cases are usually subnormal to normal in temperature, have elevated blood pressure, with rapid pulse, overweight, and are especially of a stocky, red flushed, puffy skin complexion, along with the above symptoms.

There is a tendency, once elevated blood pressure is discovered, to attribute all the patient's discomfort to this rise in pressure. The patient then is left with the impression that whatever trouble remains, after taking the latest medication must be endured.

Our medical minds are not perturbed further until we see patients with the same elevation of blood pressure and pulse who

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association, May 17, 1948.

have no discomforts! In fact they often volunteer the information that their feeling of well being has been enhanced rather than hindered by the acquisition of hypertension. They are not only content with it, but count it among their essential assets.

Why this contrast between two such groups, both of which have the same elevation of blood pressure and pulse?

Of course, we as doctors, are consulted much more often by the group having complaints than those who are comfortable, so we wish to show a method by which many of these hypertension cases can be further helped.

Among the positive eye findings which the oculists will find during the examination of these cases are a high incident of cataracts in varying stages of maturity, retinal and vitreous hemorrhages, occasionally an iritis, with or without secondary glaucoma, now and then an inability to read 20/20 with correcting lenses, even though the eye shows no obstruction to the light pathway. We have seen but one case, and that in an Indian woman, where the hyperglycemia had produced a bilateral cyclitis with dense, round, posterior corneal precipitates which resulted in permanent reduction of visual acuity. No nystagmus, optic atrophy nor "micro-aneurysms" of the retinal capillaries were identified in any of this series.

The patient himself will show you often heavily injected and distended scleral, and conjunctival vessels, with the accompanying edema of these layers, as well as the puffy eye lids, face and ankles. Many of these patients are not only overweight, but have a bloated edematous appearance, closely resembling the subcutaneous edema seen in cutaneous allergic reactions—for this might well be the basis of the edema.

Quite a few have sudden onset of symptoms as though nature had come to the breaking point, and unless the elevated blood pressure, increased pulse, overweight and symptoms are kept in mind, the negative urinalyses and normal fasting blood sugar may cause the examiner to halt short of finding the hyperglycemia. Many of these cases for years have been treated simply for hypertension, while others have had elaborate skin sensitization tests with both negative laboratory and therapeutic results.

After the hyperglycemia is under control the remainder of the headache, dizziness, photophobia, lacrimation and asthenopic symptoms in these hypertension cases can be further relieved by leveling their eyes, so

that each eye focuses level with its mate when held comfortably to a common horizontal line. This is done by finding the amount of strain that the extraocular muscles are collectively exerting in an effort to maintain the two eyes on this common line of focus. This strain carries the name of latent vertical phoria.

Now that latent vertical phoria is suspected, how are we to find it? Certainly not with momentary occlusion of the screen test, for this is useless in detecting this condition. The vertical balance may show no deviation, with or without the screen test, so unless we continuously occlude each eye 48 hours to relax the extraocular muscles, we will miss the diagnosis. After each eye has been occluded separately for this period of time, fusion must not be permitted, or the amount of imbalance will be quickly lost.

In latent phorias the extraocular muscles still possess the ability to fuse if allowed to do so, even though this means the expenditure of all the muscle's reserve. The muscles cannot remain long in this state of maximum exertion, for such brings on the patient's eye symptoms. Therefore latent phorias precede heterophorias by months or years. In the state of latency nature is still continuing to force the extraocular muscles into orthophoria. This accounts for more symptoms and complaints from the patient than when the muscles have deteriorated to the weaker stages, like manifest and tropia classification, where the muscles no longer make the effort to maintain fusion.

To occlude one eye without eventually occluding the opposite eye causes the imbalance in the second to be missed entirely. If the deviation is one of bilateral imbalance, only half of the latent vertical phoria will be detected by monocular occlusion. While if the condition is monocular imbalance and the affected eye is not patched, the diagnosis and subsequent relief of the patient is lost altogether. Therefore, each eye must be continuously occluded for two days and the readings of each taken before the job is finished.

These occlusions can be made upon each eye weeks apart, if necessary to the patient's schedule of work, for this imbalance is not one which fluctuates from day to day nor week to week. Continuous complete occlusions as illustrated in Figure I is superior to frosted lenses, for with these the patient fuses when looking over or around the glasses, as well as upon removing them on retir-

ing or when cleaning the glasses. The occlusion must be continuous, not interrupted nor incomplete.

To prevent fusion after removal of the eye patch, the occluded eye is kept closed until a 10 degree prism base in is placed before each eye to maintain diplopia. Then the amount of latent vertical imbalance is measured by having the left eye see a horizontal streak of light through a vertical multiple maddox rod and a light or dot with the right eye. The amount of deviation is then measured by bringing the horizontal streak level with the center of the dot, by adding the necessary vertical prism. The prism reading is always before the right eye and is the amount of deviation for the eye just occluded for two days. These readings are made for distance and near, each time, with the corrective refraction lenses in place during the latent vertical phoria determination, being careful to add the bifocal strength for near if the patient is a presbyope. In this manner latent hypo- or hyperphoria can be measured whether it is unilateral, bilateral or mixed in type.

Since the prismatic reading is always made in front of the right eye, the examiner must remember to reverse the direction of the prism for the final left lens prescription, following occlusion of the left eye, such as two prism right base down becomes two prism left base up for the patient's left lens. The reading following occlusion of the right eye remains as read, such as two prism right base down remains two prism right base down for the final right lens prescription.

Post occlusion findings will show that about 80 per cent of these routine refractions have latent vertical phoria, and it is these we are failing to help until their vertical correction is included in the glasses. This is proven when we see patients complaining of their bifocals or refusing to wear their glasses continuously, even though their visual acuity is normal only with the refraction correction. They admit better vision, yet they fail to receive eye comfort, and it is this they first desire. When the identical refraction findings are combined with the vertical prisms, the patient's behavior is immediately reversed, for they wear their glasses continuously rather than spasmodically. In other words, they look through their glasses when the vertical imbalance is corrected instead of looking at their glasses.

Patients notice the shift in position of objects when the vertical prism is two diopters or more before either eye. This is evident for

10 to 15 minutes, usually on putting the glasses on or upon removing them, for a period of two to three weeks. Few patients object to this "on and off" sensation because they have secured the eye comfort they set out to get from their oculist. Patients seemingly consult us especially when they have failed to receive relief from their physical distress and pain. After all, this is our role in life as physicians to the body, and to keep pace with the demand placed upon us we must have added means of diagnosing this commonly overlooked latent vertical imbalance.

The procedures we use for manifest phorias and squints will not suffice in detecting latent vertical phorias, and since latent vertical phoria is such a common finding, every oculist will find scores of these compared to the occasional advanced case of heterophoria and can bring relief without surgery, which is always welcomed.

Stevens has pointed out that the distress of one degree vertical imbalance is equal to 14 horizontal deviation. If a vertical imbalance is found on preocclusion examination, it is nearly always increased after 48 hours of occlusion of each eye separately, which explains why the lesser or preocclusion reading has been credited with such importance. It was not the detected vertical phoria, but the undetected amount which was contributing most of the patient's eye distress. This is further shown by the greater relief from post occlusion than preocclusion findings in the patient's glasses, even in cases which show no preocclusion vertical imbalance. It is the prolonged occlusion, not the momentary screening, which brings out the hidden phoria. Its detection is essential to the relief of the patient's symptoms, otherwise the two eyes continue their tendency to focus at different levels and maintain vertical balance only through maximum strain, which produces a vicious cycle of events.

Why do we wonder that four out of five refraction cases have vertical imbalance? Does it alarm us to find the same proportion having an error of refraction? Are not the intrinsic and extrinsic ocular muscles both essential in our daily work? In fact, more refraction cases will be found needing no spherical or cylindrical correction than there are needing no vertical correction!

The occlusion of each eye separately does not demonstrate a Bell's phenomena as some have claimed, for we do not sleep with one eye open and the other closed. Neither will a Bell's phenomena explain why these oc-

cluded eyes deviate downward usually, rather than upward as in sleep, nor why one eye occlusion gives a greater deviation than its mate, nor why these deviations tend to increase if untreated, nor why there is a lack of return of either eye to the orthophoric state, as following sleep.

No, the separate occlusion of eyes does not demonstrate a physiological Bell's phenomena for when we sleep both eyes are at rest, while in separate occlusions, one eye continues to work at its chosen level, while the opposite eye takes a position of rest. It is the difference in the vertical levels of rest that we seek to determine by separate occlusion of each eye, for it is upon this level the eye prefers to work.

Patients with one blind or amblyopic eye never suffer from headaches or asthenopia of the latent vertical phoria type because no fusion effort is present and no symptoms are provoked. Therefore, patients with vertical imbalances must have binocular vision, and the nearer equal the vision of each eye, the more certain they are to develop symptoms in their effort to fuse upon a common level.

The primary position readings in this shortened procedure are the only measurements made so it condenses Marlow's technique to an office routine, taking but a minute or so to determine. It does not tell us the individual or exact muscles at fault, instead it is a summary of the vertical deficiency of the muscles acting collectively, not individually. We use our eyes chiefly in the primary position or mild deviations from that, and here the position is determined by collective action of the extrinsic muscles. So the emphasis is placed on the axis where we work the most, for in relieving the major strain, nature usually compensates for the lesser or individual muscle deviation. We are not contemplating surgery, so are not as desirous of determining the individual or number of muscles at fault, as we are to know the position the eye takes when the collective action of the extraocular muscles is taking place without strain in the primary visual axis. Here the eyes do their major work, which makes it our major concern. We have no quarrel with those who insist upon knowing each muscle's finding in its field of action; instead we are contracting the procedure into a practical office routine so more people can be helped.

Latent vertical phoria is associated commonly with some endocrine dysfunction but it does not tell us the individual gland at fault, nor its rate of activity. Here again it

gives us a summary and not a diagnosis, much as a thermometer is an indicator of fever or the lack of it. Latent vertical phoria merely helps us to orient the patient's type of trouble, in these cases of hypertension with rapid pulse and hyperglycemia.

Those cases with elevated blood pressures and elevated pulse, obese, having nocturia, loss of weight, and increased dizziness will show hyperglycemic glucose tolerance curves in many instances, even in the absence of glycosuria. In bilateral oophorectomies, the diagnosis is self-evident. Most of those cases with subnormal temperature, low blood pressure, slow pulse and edema will be subnormal thyroids. At puberty, during and shortly following pregnancies, and again at the menopause, distinct increases in latent vertical phoria are found, so its endocrine connection has but to be sought to understand the cause more fully.

Uneven orbits may account for some of these muscle anomalies, and trauma such as car wrecks, football, boxing and wrestling, head injuries, produce latent vertical phoria symptoms and can be relieved by vertical prism inclusion, but the great majority seem endocrinal in origin and can be classified after appropriate laboratory and clinical procedures have been made.

Unless the endocrine cause is corrected, latent vertical phoria tends to increase so our duty extends farther than the glass prescription.

For a guide we have taken the following readings as normal:

1. Temperature 98.6. Those readings below this were considered subnormal, while those above were elevated.

2. Any systolic blood pressure of 140 hg mm or above for any age was considered elevated, and the same was done for 85 hg mm diastolic readings. The more the advanced age patients surpassed these figures the more intently we sought a two hour Exton-Rose glucose tolerance reading, and as the young patient approached these readings the same was true.

3. The rested pulse rate of 72 in the male and 80 in the female for the ages included in this series, was taken as the normal counts.

Of 213 cases studied, 78 or 36 per cent gave sufficiently high glucose tolerance readings to warrant being classified as hyperglycemia cases. The age limits in this series extend from four and one-half to 93 years. There are 73 males and 140 females within

this age selection. All had recurring or chronic conditions of either the eye, ear, nose or throat area, indicating that hyperglycemia produces more pronounced symptoms in the cranial nerve region than in the spinal nerve portion of the body.

The averages for temperature in the 78 hyperglycemic cases in this series were 98.4, systolic blood pressure for adults 161, systolic blood pressure for children 88, diastolic blood pressure for adults 89, diastolic blood pressure for children 57, pulse rate 88, fasting blood sugar 113, glucose tolerance blood sugar at 30 minutes 172, at one hour 224, at two hours 191.

We left it with the family doctor to treat and classify the condition as he thought best, for he is the most capable of determining, whether the hyperglycemia is due to diabetes mellitus, overweight or kidney dysfunctions, pituitary, adrenal, thyroid hyperfunctions, or trauma and the like. Our part as oculists is to detect, rather than treat these systemic conditions.

CONCLUSIONS

Elevated blood pressure, and fast pulse in the presence of a normal or subnormal temperature are frequently enough associated with hyperglycemia to warrant doing two hour Exton-Rose glucose tolerance tests routinely in these cases. Otherwise the hyperglycemia will be undetected since single urine, post meal and 24 hour urines are negative for sugar in the majority of these cases. The fasting blood sugar usually is not elevated, therefore, the two hour test is necessary to show the type of blood sugar curve.

Overweight, short neck, stout individuals predominate in this group, and cataracts are so frequently seen that the hyperglycemia is suspected of being a contributing cause. Therefore, two hour glucose tolerance curves are indicated prior to cataract extraction and helps prevent intraocular hemorrhage so prevalent in these cases.

Latent vertical phoria is constantly found in elevated blood pressure and fast pulse cases, and upon inclusion of the vertical correction in their lenses, the dizziness, photophobia, lacrimation and asthenopic symptoms are further relieved, even after control



FIGURE 1
The occlusion is complete and continuous for at least 48 hours to each eye separately. Shows, driving, reading, etc., permitted with the opposite eye during the occlusion period. No pressure is made on the eye patched.

of the blood sugar, in non-cataract cases. There is less hesitation in giving the post-cataract binocular vision when the eyes can be made to work together comfortably.

Latent vertical phoria is a constant finding in endocrine dysfunctions, and although it does not indicate the gland involved, nor its rate of activity, it points to the endocrine, as the seat of trouble, much the same as a thermometer indicates fever, without disclosing its origin.

Latent vertical phoria should enter into the differential diagnosis in suspected cases of Meniere's syndrome, "sinus" and "sick" headaches, "loss of equilibrium," train and car sickness, and is present in approximately 80 percent of routine refraction cases.

Hyperglycemia is a frequent cause of chronicity in conditions of the eye, ear, nose and throat area, especially in chronic sinusitis and cataracts, and is readily suspected by finding an elevated blood pressure, with rapid pulse in the presence of a normal or subnormal temperature, even, with a negative urine test, and normal fasting blood sugar.

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CLINICAL PATHOLOGIC CONFERENCE

The University of Oklahoma School of Medicine

Presented by the Departments of Pathology and Medicine

HOWARD C. HOPPS, M.D. AND W. W. RUCKS, JR., M.D.

OKLAHOMA CITY, OKLAHOMA

DR. HOPPS: The diagnosis for this morning is probably obvious to all of you who had time to study the protocol. Despite this, there is much to be learned from this case regarding differential diagnosis and course of the disease. We are fortunate in having with us Dr. Rucks to analyze and discuss the clinical data.

PROTOCOL

Patient: P. R., white female, age 51; admitted January 8, 1946; died January 11, 1946.

Chief Complaint: Weakness — two and one-half years, weight loss, pain in abdomen.

Present Illness: This 51-year-old white female dated the onset of her illness to two and one-half years prior to admission to the hospital, when she first noted a mass in the left upper abdomen. This mass progressively increased in size, and there developed weakness, loss of weight and abdominal pain, particularly in the left side. Pain in the back was a prominent symptom for which she received chiropractic therapy. She had never consulted a physician.

Physical Examination: This was a jaundiced, emaciated white female, with a grossly distended abdomen, equivalent to a nine months pregnancy. The diaphragm was "elevated" bilaterally and moist rales were heard in the right base. The heart was displaced to the left and upward. A precordial systolic murmur, loudest over the mitral area, was heard. The spleen was markedly enlarged and extended well below and a few centimeters to the right of the umbilicus. The splenic notch was easily palpated. Severe pain was elicited upon pressure over the sternum.

Laboratory Data: Urinalysis revealed no abnormality. The red blood count was 2.7, the white blood count 750,000 with 95 per cent polys (myeloblasts 29 per cent, promye-

locytes 25.5 per cent, myelocytes 23 per cent, juveniles 6 per cent, stabs 2.5 per cent, eosinophilic myelocytes 2 per cent, basophilic myelocytes 1.5 per cent) and 4 per cent lymphocytes. The total protein was 5.8 Gm. per cent. The blood Mazzini was "doubtful." The blood Wassermann was negative.

Clinical Course: The patient did not eat. The temperature fluctuated from normal to 101°. The pulse ranged between 90-110. On the third hospital day, she had epistaxis which totaled approximately 200 cc. before it could be controlled by a nasal pack. Following this episode, the patient was very weak and in a semi-comatose state. She expired during the evening with a terminal temperature of 105.6°. She had received one transfusion of 500 cc. of blood.

CLINICAL DIAGNOSIS

DR. RUCKS: The clinical record, as we have it here, is quite brief. The patient's age was 51; she entered the hospital acutely ill and died in three days. Symptoms relative to this illness had apparently existed for two and one-half years. It is interesting to note that the first sign of illness was an abdominal mass. As we read of the patient's hospital course and note the laboratory findings, we immediately come to the positive and unquestioned diagnosis of leukemia. Let us ignore this data for a moment however, and consider possible diagnoses based upon present illness and physical findings alone.

—Certainly the most striking change was the marked splenomegaly and we presume that splenic enlargement was the basis for the left upper abdominal mass which the patient observed two and one-half years before her death. If there was an associated lymphadenopathy (which is probable) it is not mentioned here. Chronic myelogenous leukemia typically produces marked splenomegaly and we would certainly consider this as a likely

possibility. In this same general category, *Hodgkin's disease* must be entertained. *Lymphatic leukemia* will produce splenomegaly, but not usually to this marked degree. In this condition lymphadenopathy usually predominates. *Cirrhosis of the liver* frequently causes splenomegaly and this may be quite marked, especially if the cirrhosis is associated with *Banti's syndrome*. Another form of so-called hypersplenism which would produce splenomegaly is familial hemolytic jaundice. These conditions could also account for anemia, weight loss and weakness. One sees very large spleens among the natives in countries where *malaria* is endemic and there are repeated infections year after year, but such is rarely seen in this locale. *Subacute bacterial endocarditis* can bring about considerable enlargement of the spleen, anemia, weight loss and progressive weakness. Ultimately one expects evident embolic phenomena. Oft times, however, the diagnosis is long delayed in this condition because of its rather vague protean manifestations. When we learn of the very marked leukocytosis and large number of circulating blast forms, there is little doubt but that we are dealing with a victim of leukemia. A so-called *leukemoid reaction* can mimic the picture of leukemia within certain limits, however. This is usually associated with profound infections, the count rarely exceeds 250,000, and the high percentage of blast forms which was observed in this case, is not seen. A leukemoid reaction rarely occurs in bacterial endocarditis. It is not uncommon to observe it in whooping cough.

Abdominal pain in leukemia is not uncommon, especially if there is marked enlargement of the spleen. Stretching of the capsule and occasionally the mere weight of a large spleen will cause abdominal distress. The pain in the back, of which this patient complained, may have been an effect of osseous leukemic involvement with periosteal irritation of dorsal and lumbar vertebrae. There were moist rales in the right lung base. Patients with marked splenomegaly often have rales which are an effect of partial (compression) atelectasis due to elevation of the diaphragm by pressure from below. In this case circulatory failure probably played a causal role in death. The patient might have had rheumatic endocarditis, but this is unlikely. The systolic murmur was probably an effect of anemia.

A hemorrhagic tendency is common in acute leukemia. It is not so common in

chronic leukemia. This patient had epistaxis. Knowing the clinical story and that the patient had 750,000 white blood cells cu.mm., one would make a diagnosis of *chronic leukemia*. This is quite in keeping with the degree of splenomegaly and the duration of life after splenomegaly first became evident. As a rule patients with chronic leukemia present a majority of differentiated leukocytes and a relatively small percentage of blast forms. It is quite atypical that this patient should have had such a high percentage of blast forms. Despite this, on the basis of clinical evidence, we must conclude that this patient had *chronic myelocytic leukemia*.

CLINICAL DISCUSSION

DR. HOPPS: Would you care to speculate as to the precipitating cause of death?

DR. RUCKS: The cause of death, I think, is difficult to say. Because of this patient's anemia, in connection with increased metabolic requirements brought about by leukemia and fever, I presume that she died of peripheral circulatory failure. This is not a satisfactory answer.

QUESTION: Do you attribute the abdominal enlargement entirely to splenomegaly?

DR. RUCKS: I believe so. There is no mention of bulging flanks or shifting dullness.

QUESTION: How do you explain the jaundice?

DR. RUCKS: I do not know. There may have been intervascular hemolysis, but I know of no good reason why this should have occurred.

QUESTION: What is the significance of tenderness over the sternum?

DR. RUCKS: In chronic myelocytic leukemia there is often a soreness of the sternum. Frequently the patient will not be aware of this until tender areas are demonstrated to him. This is thought to be due to interstitial infiltration with bony resorption, etc. It is present in about 75 per cent of patients with leukemia.

ANATOMIC DIAGNOSIS

DR. HOPPS: This patient did have chronic myelocytic leukemia and practically all of the points that Dr. Rucks brought out were confirmed at necropsy. Abdominal distention was largely an effect of splenomegaly. The spleen weighed 3,750 grams, approximately 25 times the normal! It extended to within three centimeters of the symphysis pubis. Chronic myelogenous leukemia produces a degree of splenomegaly which is not equalled in any other condition. The abdominal pain of which the patient complained is explained

in part, at least, by several infarcts in the spleen, up to five cm. in diameter, and of varying age. Multiple infarcts are usually found in any spleen which has become markedly enlarged. These are probably related to the marked increase in requirements of blood. Since splenic infarcts always involve the peritoneal surface, abdominal pain is an expected symptom. Thus, episodes of upper left abdominal pain may be expected in any condition associated with marked splenomegaly. The liver too contributed to abdominal distention. It weighed 5,600 gm., approximately four times the normal. The spleen had displaced the liver to the right and the liver extended down to within two cm. of the symphysis pubis. The marked enlargement of these two organs caused marked elevation of both domes of the diaphragm and basilar atelectasis of both lungs as Dr. Rucks had surmised. There was no pneumonia. The heart was of normal weight but was slightly dilated. The myocardium was flabby and exhibited marked fatty change. It was arrested in diastole and this picture is compatible with Dr. Rucks' conclusion that the *immediate* precipitating cause of death was heart failure.

A major factor leading to the heart failure was a condition which was entirely unsuspected clinically. Speaking in more usual terms, this patient died of *acute suppurative peritonitis*. There was approximately 500 cc. of yellow gray, creamy, purulent fluid free in the peritoneal cavity. This had its origin in acute suppurative appendicitis; the appendix had ruptured. Many patients have hyperpyrexia as a terminal episode. The terminal fever in this instance however, was an unrecognized manifestation of peritonitis. This brings out an important point in relation to leukemia, one which is often ignored. This patient had 750,000 white blood cells/cu. mm. Actually, she had relatively few mature leukocytes which could combat an infectious process. So far as function of leukocytes is concerned, she might as well have had agranulocytosis. The more immature the leukocyte, the less effectively it functions in combating infection. Still another handicap which this patient was unable to overcome was that of protein malnutrition. It has been clearly demonstrated, by Cannon and co-workers, that essential amino acids are required for the production of antibody globulin. With a marked deficiency of protein such as this woman had, the ability to form antibodies, in response to infection, must have been markedly decreased.

Two things remain to be explained: the hemorrhagic tendency and the jaundice. Hemorrhagic diathesis is common in leukemia and often this is associated with thrombocytopenia. Many times, however, hemorrhages occur despite normal platelet levels. It seems that the major factor relating to abnormal bleeding, in patients with leukemia, is a marked increase in capillary fragility. The basis for this is unexplained. In our case of today; there were recent hemorrhages in the gastric mucosa, in addition to those in the nasal mucosa and sclerae. This patient's jaundice was hepatic (hepato-cellular) in origin. There was marked leukemoid infiltration of this organ with resultant diffuse degenerative changes, so-called parenchymatous degeneration, and also considerable fatty change. In addition, there were focal areas of necrosis related to small thrombi in central veins.

Our final anatomic diagnosis was:

Chronic myelogenous leukemia with very marked involvement of the spleen, liver and bone marrow, with lesser involvement of the lymph nodes and suprarenal glands and with petechial hemorrhages in the sclerae and gastric mucosa, and with a single focus of amyloid infiltration in a parabronchial lymph node.

Acute suppurative peritonitis (streptococcal) and acute suppurative appendicitis

Focal necrosis, focal areas of infarction and recent thrombosis of triadal vessels in the liver

Focal necrosis with hemorrhage in the suprarenal gland

Moderate hypertrophy and dilatation of the heart

Marked fatty change in the heart and liver (small vacuole)

Marked parenchymatous change in the liver and kidneys with icteric nephrosis
Icterus, slight

Anemia (clinical diagnosis)

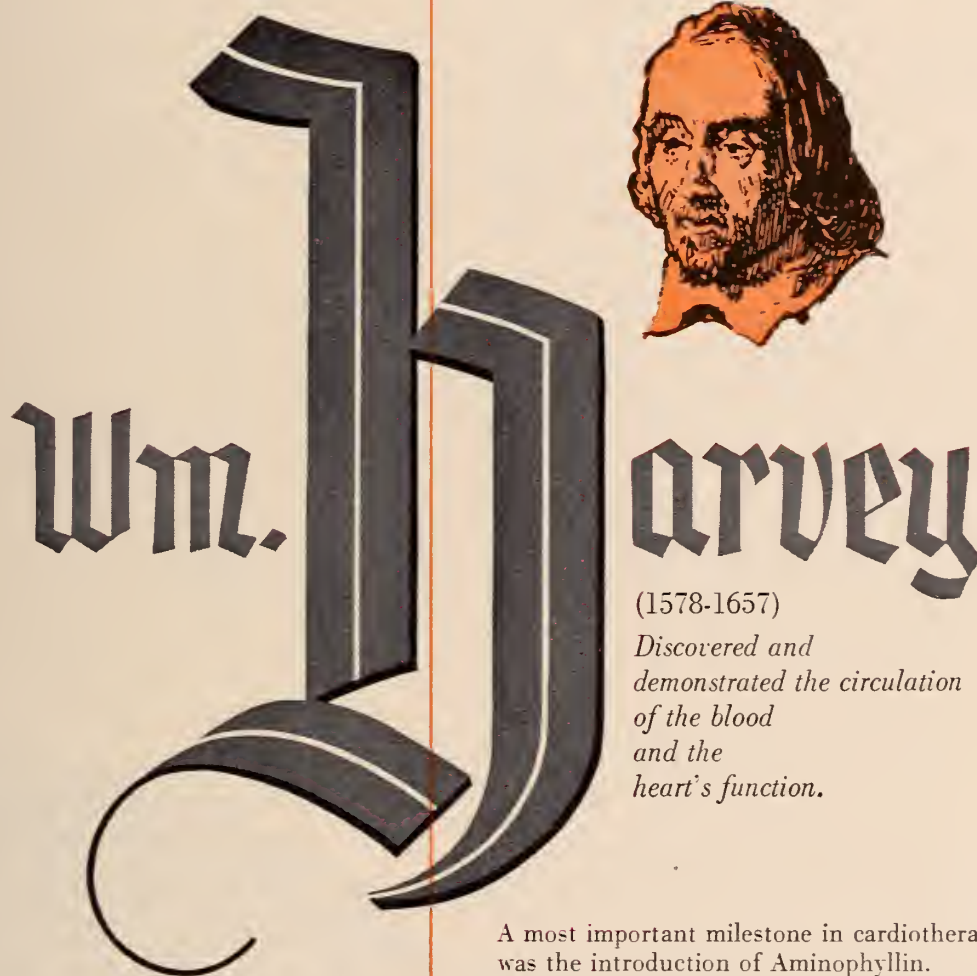
Malnutrition (protein and vitamin deficiency)

DISCUSSION

QUESTION: Might the terminal infection be an explanation of the unusual percentage of immature leukocytes reported in the differential count?

DR. HOPPS: I believe it is more likely that this represents a terminal shift to the left. We frequently observe a marked change in the blood picture in leukemia as a terminal episode.

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President's Page

Our Councilors have done a fine job in arranging to attend the meetings held already this year. There are several meetings planned for the rest of the year. I feel that each Councilor will do his utmost to attend these important meetings.

The position of Councilor carries with it inconvenience and loss of time from practice of medicine, and the only recompense is self-satisfaction from serving the medical profession. Since each Councilor makes a sacrifice to serve and since he wishes to carry out the will of the doctors in his area, he should be informed of their opinion.

Every member of the profession and especially the officers of the county medical societies should give their elected Councilors every possible consideration. Each should inform the Councilor of their problems in order that at the regular meetings intelligent discussions can be held on each problem.

Now that the summer is over and regular meetings will be held by the county societies, I hope each society will make an effort to have their problems presented through their Councilors; efficiency will be increased, and our State Association will be able to better serve the profession.

C. E. Northcutt

President.

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GENERAL NEWS

EIGHTEENTH ANNUAL CLINICAL SOCIETY SET

The Oklahoma City Clinical Society is again anticipating an outstanding meeting this year with dates for the eighteenth annual conference set for October 25, 26, 27 and 28, at the Biltmore Hotel, Oklahoma City.

The registration fee of \$15.00 includes the clinical pathological conference, general assemblies, postgraduate courses, round table luncheons, smoker, dinner meetings and commercial exhibits.

Seventeen distinguished guest speakers are slated to address the conference. Among the guest speakers are Morris Fishbein, M.D., Editor, J.A.M.A., Chicago; J. W. Conn, M.D., medicine, University of Michigan School of Medicine, Ann Arbor, Michigan; Katherine Dodd, M.D., pediatrics, University of Cincinnati School of Medicine, Cincinnati, Ohio; John G. Downing, M.D., dermatology, Boston University School of Medicine, Tufts College Medical School, Boston; Lawrence S. Fallis, M.D., surgery, Wayne University College of Medicine, Detroit; Arthur B. Hunt, M.D., obstetrics, University of Minnesota Graduate School, Mayo Foundation, Rochester, Minn.; R. H. Kampmeier, M.D., medicine, Vanderbilt University School of Medicine, Nashville, Tenn.; Frank R. Look, M.D., gynecology, Bowman Gray School of Medicine of Wake Forest College, Winston-Salem, North Carolina; and

William P. Longmire, M.D., surgery, Johns Hopkins University School of Medicine, Baltimore, Md.; Tracy O. Powell, M.D., urology, College of Medical Evangelists, Los Angeles, Calif.; David G. Pugh, M.D., roentgenology, University of Minnesota, Graduate School, Mayo Foundation, Rochester, Minn.; Harold G. Scheie, M.D., ophthalmology, University of Pennsylvania School of Medicine and Graduate School, Philadelphia, Pa.; Allen F. Voshell, M.D., orthopedics, University of Maryland School of Medicine, Baltimore, Md.; Theodore E. Walsh, M.D., otolaryngology, Washington University School of Medicine, St. Louis, Mo.; Owen W. Wangenstein, M.D., surgery, University of Minnesota School of Medicine, Minneapolis, Minn.; Theodore A. Watters, M.D., neurology, consultant neurologist, New Orleans, La.; and John B. Youmans, M.D., medicine, University of Illinois College of Medicine, Chicago, Ill.

FIGURES RELEASED ON V.A. PAYMENTS

Figures released by the Muskogee Regional office of the Veterans Administration indicate that members of the state medical association serving that portion of the state received \$11,000 for the month of July, in payment for services rendered under the Veterans Home Town Medical Care Plan. Like figures for the Oklahoma City regional office are not available at this time.

Considering that approximately 60 per cent of the veterans of Oklahoma reside in the Oklahoma City region it can be reasonably estimated that payments by the Oklahoma City office for the same period would be approximately \$16,500.

It is anticipated that comparable monthly reports will be available from both Veterans Administration offices which will be a true reflection of payments made under the plan in the future.

PUBLIC POLICY AND SUB-COMMITTEES MEET

The Public Policy Committee of the Oklahoma State Medical Association met Sunday, August 1, to make plans to put the public relations program as adopted by the House of Delegates, into effect. As a means of achieving that purpose, dates were set for meetings of the subcommittees. Representatives of the Woman's Auxiliary have been invited to serve in an advisory capacity on the public relations committee and its six sub-committees. Mrs. Charles A. Smith is the representative of the Auxiliary on the public relations committee.

The newspaper sub-committee met August 8 when plans were developed for improving the relationship between the medical profession and the press through personal contacts with the members of the press throughout the state and encouragement of better cooperation by members of the profession. Paid newspaper advertising was discussed and it was agreed that it would not be resumed until it is possible to develop a program which will be more satisfactory to the members of the profession as a whole. In the meantime a program of press releases on health topics of interest to the general public will be carried out, keeping in mind that such a program to be successful, must be supplemented from time to time with paid advertising. Mrs. Robert Howard is the Auxiliary representative on the newspaper committee.

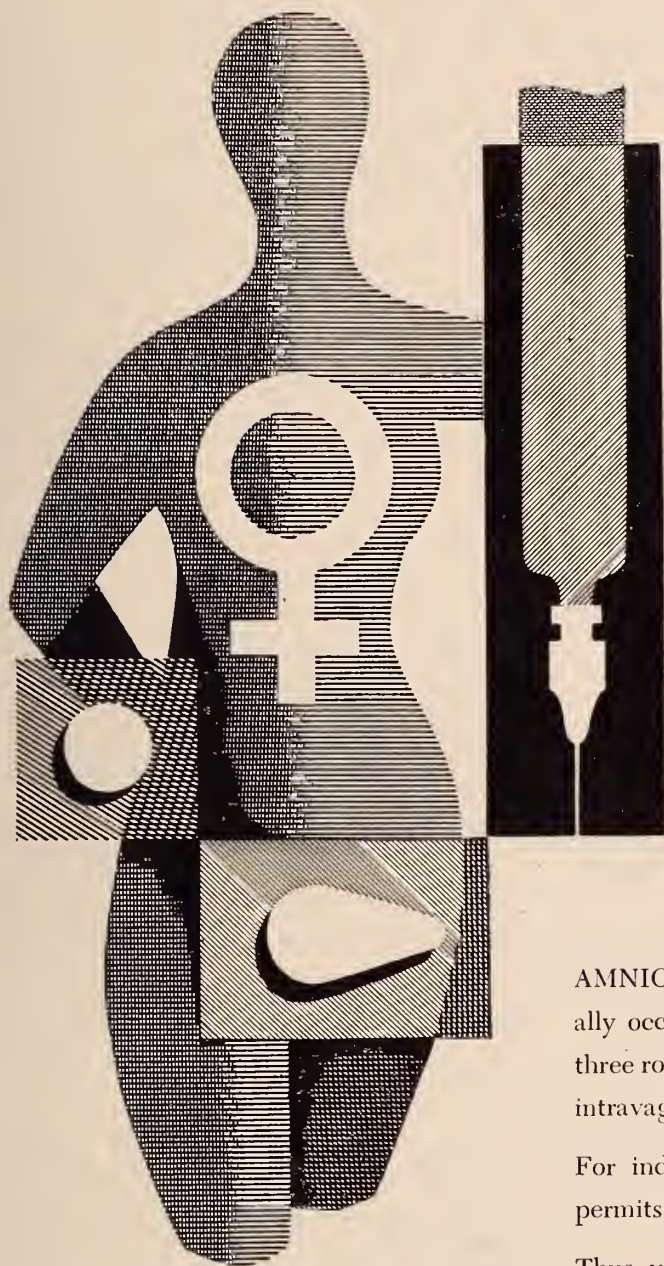
Sunday, August 15, was the date of the radio sub-committee meeting when it was reported that five radio stations, KOCY Oklahoma City, KTUL Tulsa, KADA Ada, KSPI Stillwater, and WBZ Pouca City, are now broadcasting the "Tell Me, Doctor" series. While tentative arrangements have been made for the series to be broadcast by the stations at Woodward, Enid, Bartlesville, Muskogee, Durant, and McAlester, all of which can be expected to begin the series in the very near future. Mrs. Ralph Rucker, Bartlesville, represented the Auxiliary at the radio meeting.

The radio committee requested the Auxiliary to conduct a survey to determine the listener audience of the programs which are now being broadcast in an effort to find out whether or not the program is effective. The Auxiliary was also requested to make a survey among its own members to be used as a basis for recommendation to the committee as to the type of radio publicity which they believe will offer the most effective listener appeal.

Another meeting of the radio sub-committee is slated for October 24 at 7 p.m. at the Skirvin Hotel, Oklahoma City. It will be a dinner meeting.

O.S.M.A. CALENDAR SET UP

Mimeographed calendars for the months of August, September, October, November and December have been prepared by the executive office of the Oklahoma State Medical Association and have been sent to all officers and committee members. The calendars have a separate sheet set up for each month with all meetings of interest to O.S.M.A. members marked in the various squares for each date. Committee members named to attend the meetings are also designated on the calendar.



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RESEARCH FOUNDATION RECEIVES \$25,000 CHECK

A \$25,000 check from the Damon Runyon Memorial fund was sent from New York recently to the Oklahoma Medical Research Foundation, Hugh G. Payne, foundation general manager, announced.

In a letter to Governor Turner, Sherman Billingsley, former Oklahoman who now owns New York's Stork Club, explained the entire sum is to be used for cancer research. Billingsley said the check had been given to him by Walter Winchell, president of the Damon Runyon Memorial fund.

The initial contact in interesting Runyon Memorial fund directors in the state foundation was made by Dr. Waldo Stephens, who called upon Billingsley. A few weeks ago the foundation's visitation committee, headed by building chairman William T. Payne and research committee chairman Dr. Henry H. Turner, made further representations to the memorial fund committee.

The bequest, first of its size to be received from a national organization, is the second \$25,000 check received by the foundation this summer. In July, the Frank Phillips Foundation donated \$25,000.

The large contribution raised the total collected by the foundation since its inception to \$2,263,570. Total sought by the foundation is \$3,000,000.

MEDICAL SCHOOL SPONSORS POSTGRADUATE COURSE

In an endeavor to make it possible for doctors throughout the state to continue their postgraduate education, the University of Oklahoma School of Medicine is again sponsoring a one day postgraduate review. The course will be on obstetrics and will be held at Hillcrest Memorial Hospital, Tulsa, Thursday, September 30, 1948.

Dr. Arthur A. Hellbaum, who is in charge of the postgraduate program of the medical school, stated that the medical school is most desirous of continuing this type of postgraduate study if sufficient interest is shown on the part of the physicians. Dr. Hellbaum further pointed out that the school is making every effort to make these programs both instructive and practical.

Dr. William F. Guirriero, associate professor of obstetrics and gynecology, Southwestern Medical College, Dallas, Texas, will be the special guest lecturer. In addition to Dr. Guirriero, a number of the obstetricians from Tulsa will contribute to the program.

This session is planned especially for those physicians in general practice who are interested in a review of obstetrics.

COUNCILOR DISTRICTS; COUNTY OFFICERS TO MEET

The second post-war meeting of all secretaries and presidents of county societies of the Oklahoma State Medical Association is called for 10 a.m., September 19 at the Skirvin Hotel, Oklahoma City.

The principle topic of discussion for the county officers will be reorganization of county societies and possible redistricting of the state into new councilor districts. Reorganization of county societies will involve rechartering and the preparation of constitutions for those societies which have none and a revision of those constitutions which may require it.

The public relations program will also be presented to the county society officers in an attempt to work out a

practical means for putting it into effect throughout the state.

Councilor district meetings have been set for the last week in September and the 11th to the 15th of October and it is hoped that more detailed information can be given to the councilor districts following the county society officers' meeting.

Councilor district meetings are as follows: District six, September 27; District seven, September 28; District 10, September 29; District nine, September 30; District eight, October 1; District three, October 11; District one, October 12; District two, October 13; District five, October 14; and District 4, October 15.

SOUTHERN MEDICAL ASSOCIATION

The 42nd Annual Meeting of the Southern Medical Association will be held at Miami, Florida, October 25-28 with the Dade County Medical Association as sponsor.

At a meeting of the Executive Committee on July 24, Dinner Key was selected as general headquarters for the following: registration, all section meetings, scientific, technical and hobby exhibits, and motion pictures. Dinner Key (the former Pan American Air Depot) is 10 minutes' ride from the general hotel headquarters and makes it possible to hold all of the above activities in one location. There is parking space for over 1000 automobiles around the main building.

The evening programs, which will include the general public session, the general session and the president's ball, will be held at the Municipal auditorium. The auditorium is just off Biscayne Boulevard and is only a short distance from the general hotel headquarters.

Hotel reservations will be handled by the Hotel Committee, Southern Medical Association Meeting, c/o City of Miami Convention Bureau 320 N.E. Fifth St., Miami 32, Fla. Since the meeting is being held earlier than usual, all requests for rooms should be made immediately.

There will be 21 section meetings, two general sessions, one conjoint meeting (American College of Chest Physicians, Southern Chapter) and the "Miami Day" general clinical sessions.

MAKE UP ATTENDANCE URGED IN POSTGRADUATE COURSE

Good attendance has been reported in the teaching centers for the eighth circuit of the postgraduate course in gynecology now being conducted in Woodward, Guymon, Alva and Enid.

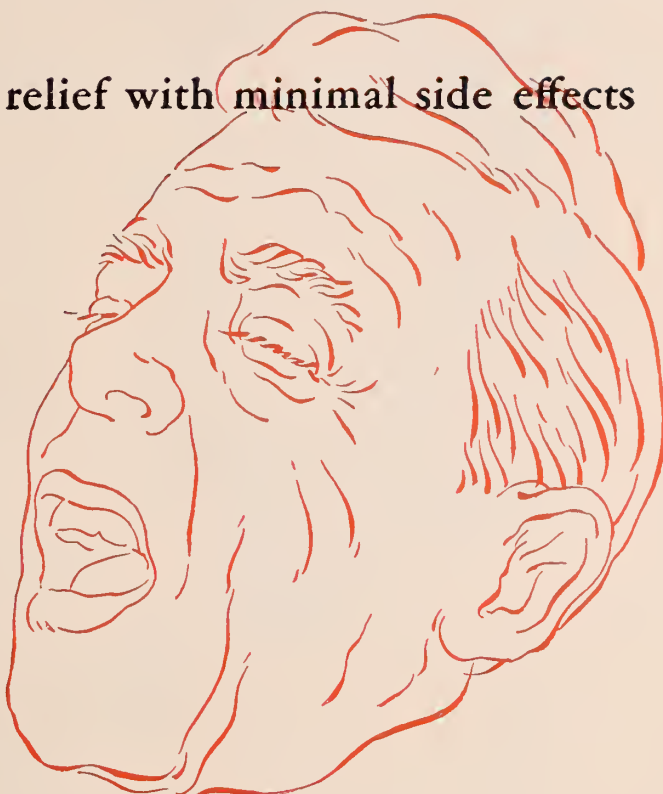
Physicians who have missed lectures in the preceding teaching centers are urged to make up these lectures at the most convenient of the above centers. Lectures are held at Woodward on Monday nights at 8 o'clock at the high school; Guymon Tuesday at 8 p.m. at the court house; Alva Wednesday at 8 p.m. at the Stephenson-LaFon Clinic; and Enid Thursday at 7:30 p.m. at the Hotel Youngblood. The lectures will be held at the same hour on the same day of the week in each center for the remainder of the course which is being given by J. R. B. Brauch, M.D.

The next and last circuit will begin the week of October 18 in the following teaching centers: Guthrie, Clinton, Watonga, El Reno and Oklahoma City (colored). Announcement letters will be mailed soon and all physicians in this area are asked to mail their enrollments to the state office promptly.

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1. ARBESMAN, C. E.: *N. Y. State Jl. of Med.*, 47: 1775, 1947.

2. LOVELESS, M. H.: *Am. Jl. of Med.*, 3: 296, 1947.

3. BERNSTEIN, ROSE and FEINBERG: *Ill. Med. Jl.*, 92: 2, 1947.

4. OSBORNE, JORDON and RAUSCH: *Arch. of Derm. & Syph.*, 55: 318, 1947.

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A.C.P. PROGRAM IS ANNOUNCED

The Oklahoma Regional Meeting of the American College of Physicians will be held at the Mayo Hotel, Tulsa, September 25. This is a renewal of previous similar meetings. The A.C.P. Oklahoma Regional Meeting was held in Oklahoma City last year. All physicians are invited to attend. The tentative program has been announced and is listed below:

- 9:30-10:00 Registration—Jr. Ball Room
Rheumatoid Arthritis:
- 10:00-10:15 General Aspects—W. K. Ishmael, M.D., Oklahoma City
- 10:15-10:30 Psychogenic Aspects—M. P. Prosser, M.D., Oklahoma City
- 10:30-10:45 Biochemical Hormonal Aspects—Dr. Arthur A. Hellbaum, by invitation
- 10:45-11:00 The Role of Health Resort in the Treatment of Arthritis—Euclid M. Smith, Hot Springs, Arkansas
- 11:00-11:15 Intermission
Clinic: Osteoporosis
- 11:15-11:30 E. Rankin Denny, M.D., Tulsa
- 11:30-11:45 Paul Strong, M.D., by invitation, Tulsa
- 11:45-12:00 Discussion by guest speaker, Leroy H. Sloan, M.D.
- 12:00-1:00 Symposium Panel on Hypertension
Moderator—Wann Langston, M.D., Oklahoma City
Medical Management—S. C. Shepard, M.D., Tulsa
Surgical Management—Averill Stowell, M.D., Tulsa
Discussion—Guest Speaker, Leroy H. Sloan, M.D.
- 1:00-2:00 Luncheon
- 2:00-2:15 D. W. Gillick, M.D., Talihina, Pulmonary Tuberculosis
- 2:15-2:30 Endocrine Studies in the Dermatoscleroses, J. H. Laub, M.D., Oklahoma City
- 2:30-2:45 The Pathology of Massive Single Doses of Radiation, Cleve Beller, M.D.
- 2:45-3:00 Metabolic Studies in Multiple Sclerosis, H. H. Jones, M.D., Winfield, Kans., invited guest
- 3:00-3:15 Intermission
- 3:15-3:45 Cerebral Spinal Complications of Vascular Disease, Leroy H. Sloan, M.D., guest speaker
- 3:45-4:30 Clinical Pathological Conference
Floyd Keller, M.D., Oklahoma City
Samuel Goodman, M.D., Tulsa
- Evening Meetings:
- Social Hour
- Annual Banquet
Wann Langston, M.D., Governor for Oklahoma, Presiding, Address by Representative of the American College of Physicians, Leroy H. Sloan, M.D.

PARTICIPATE IN FARM AND HOME WORK

At the annual Farm and Home Week held on the Oklahoma A. and M. College campus at Stillwater August 2, 3, 4 and 5, two members of the Oklahoma State Medical Association participated in a round table discussion on planned health protection.

C. E. Northcutt, M.D., president of the O.S.M.A. and James Stevenson, M.D., Tulsa, were on the panel with N. D. Helland, Tulsa, who represented the Blue Cross and Blue Shield plans.

"Better Health for Rural Oklahoma" was the theme of the program Tuesday, August 3, and in addition to the discussion on planned health protection, the following subjects were presented by physicians of Oklahoma: "Your Child's Health," Henry M. Streng, M.D., assistant professor, University of Oklahoma School of Medicine; Rural Health Centers in a Preventive Health Program," John W. Shackleford, M.D., director, local health departments, State Department of Health, and others; "How the Hospital Construction Act Serves the Rural Family," Paul A. Snelson, director of hospital division, State Department of Health; Dr. Mark Everett, Dean, University of Oklahoma School of Medicine; "The Economy of Adequate Health Facilities and Services for Rural Areas," G. F. Mathews, M.D., commissioner, State Department of Health. Other discussions on related subjects were also presented at the meeting.

ENROLLMENT REPORT ON BLUE CROSS-BLUE SHIELD

More than 348,851 Oklahomans now have membership in either Blue Cross or Blue Shield or both according to a report of membership by counties as of June 30, 1948.

Highest per cent of Blue Cross participation was in Washington County where there is 43.2 per cent participation. Woods County was next with 41.6 per cent and Pontotoc was third with 40.7 per cent. Lowest participation was in Tillman County where only .4 per cent of the population is enrolled in the plan.

Washington County also headed the list of Blue Shield participants with 27.9 per cent while Tulsa was next with 15.2 per cent. Third highest enrollment was in Pontotoc County where 15. per cent was reported. Lowest Blue Shield membership was reported in Latimer and LeFlore counties, both of which had only .1 per cent.

More than 20 counties reported more than 10 per cent participation in Blue Cross while four counties reported more than 10 per cent enrollment in Blue Shield.

TULSAN ON PROGRAM

H. Boyd Stewart, M.D., Tulsa, will speak on the practice of anesthesiology at the dinner, Friday, October 1, when the American Society of Anesthesiologists, Inc. and the Ohio Society of Anesthesiologists hold a joint meeting at the Hotel Commodore-Perry in Toledo, Ohio, October 1 and 2.

Dr. Stewart is president-elect of the Society.



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ANNOUNCEMENTS

IMPORTANT EVENTS ON O.S.M.A. CALENDAR

September 30, O. U. Medical School postgraduate course in Obstetrics, Tulsa.

September 19, County officers meeting.

September 25, American College of Physicians Oklahoma Regional Meeting, Tulsa.

September 27-30, Councilor District Meetings. (Dist. 6, 7, 10, 9).

October 1, 11, 12, 13, 14, 15, Councilor District Meetings. (Dist. 8, 3, 1, 2, 5, 4).

October 4-8, Enrollment Postgraduate Circuit Nine.

October 14-21, American College of Physicians, Los Angeles.

October 24, O.S.M.A. Radio Sub Committee Dinner Meeting 7:30, Oklahoma City.

October 25-28, Oklahoma City Clinical Society.

October 25-28, Southern Medical Association, Miami, Florida.

O.S.M.A. MEMBERS ATTEND CANCER CONFERENCE

Approximately 30 Oklahoma physicians attended the second annual Rocky Mountain Cancer Conference held in Denver July 14 and 15 at the Shirley-Savoy Hotel.

Among those who attended were Henry G. Bennett, Jr., M.D., Phil Haddock, M.D., Leland F. Shryock, M.D., Gregory Stanbro, M.D., J. R. Huggins, M.D., Austin Bell, M.D., John Powers Wolff, M.D., Stratton E. Kernodle, M.D., P. E. Russo, M.D., J. Parker, M.D., Charles O'Leary, M.D., Bela Halpert, M.D., Donovan Tool, M.D., Gerald Bednar, M.D., Reynold Patzer, M.D., Ben Ward, M.D., Robert Akin, M.D., Simon Pollock, M.D., James McMurry, M.D., M. O. Nelson, M.D., H. Benjamin Yagol, M.D., Charles Bates, M.D., E. E. Shircliff, Jr., M.D., W. Floyd Keller, M.D., and Forrest Lingenfelter, M.D. The Journal wishes to apologize for any names that are left out because names published include only those available at press time.

AMERICAN ACADEMY OF GENERAL PRACTICE

March 7, 8 and 9 are the dates selected by the board of directors for the annual scientific assembly of the American Academy of General Practice, to be held at Cincinnati next year.

NAMED TO A.M.A. COMMITTEE

James Stevenson, M.D., Tulsa, is one of the newly appointed members of the liaison committee of the A.M.A., which has been working with the American Red Cross in studying the national blood bank program. Expansion of the committee complied with action taken by the house of delegates at the A.M.A. June session.

CHEST P.G. COURSE

Council on Postgraduate Medical Education of the American College of Chest Physicians is sponsoring three postgraduate courses on diseases of the chest. One week courses will be held in San Francisco September 13-17, Chicago September 20-25 and New York November 8-12.

TO ATTEND N.P.C.

Four members of the Oklahoma State Medical Association were authorized by the Executive Committee of the O.S.M.A. to attend the National Physicians Committee in Chicago September 6 and 7. C. E. Northcutt, M.D., George Garrison, M.D., Finis Ewing, M.D., and W. Jackson Sayles, M.D., will represent the state association.

CANCER CONFERENCE TO BE HELD

The second Southwest Regional Cancer Conference will be held in Fort Worth, Texas, October 12 at the Blackstone Hotel under the auspices of the Tarrant County Medical Society and the Fort Worth Unit, Texas Division, American Cancer Society. The one-day conference will consist of morning and afternoon lecture sessions, a clinical luncheon with an open forum question and answer period and a public meeting in the evening. There is no registration fee.

Guest speakers will include: Charles Huggins, M.D., Chicago, Professor of Surgery, University of Chicago; A. R. Curreri, M.D., Madison Wisconsin, Associate Professor of Surgery, Wisconsin Medical School; James Barrett Brown, M.D., St. Louis, Associate Professor of Clinical Surgery, Washington University School of Medicine and Associate Professor of Oral Surgery, Washington University School of Dentistry; Robert A. Moore, M.D., St. Louis, Professor of Pathology, Washington University of Medicine.

OBS.-GYN. REQUIREMENTS CHANGED

A number of changes in Board requirements and regulations were made at the annual meeting of the American Board of Obstetrics and Gynecology. New bulletins are now available for distribution upon application and give details of all new regulations. These relate both to candidates, and to hospitals conducting residency services for training.

HEALTH SUPERINTENDENTS NAMED

Recently appointed county superintendents of health are: Creek County, James M. Bayless, M.D., Sapulpa; Pontotoc County, J. C. Canada, M.D., Ada; and Wagoner County, D. G. Divine, M.D., Wagoner.

OBS.-GYN. MEETING SLATED

Sixteenth annual meeting of the Central Association of Obstetricians and Gynecologists will be held in Denver, September 23, 24 and 25 at the Shirley-Savoy Hotel.

NOMINATIONS FOR SCHOLARS IN MEDICAL SCIENCE

Medical schools in the United States and Canada are invited by the John and Mary R. Markle Foundation to make nominations for the second group of scholars in medical science on or before December 1, 1948. Each school, through the dean, may nominate one candidate. Grants of \$25,000 payable at the rate of \$5,000 annually, will be made to the schools over a five year period for the support of each scholar finally accepted, his research, or both.

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OBITUARIES

I. L. Cummings, M.D.

1890-1948

Isham L. Cummings, M.D., physician in Ada since 1912, died suddenly July 23 at his home.

Dr. Cummings attended the University of Oklahoma and graduated from Chicago Medical School in 1912. He had practiced in Ada since his graduation. He was a member of the First Methodist church, Lions club, Masonic Lodge, Knight Templar.

Surviving are the widow, one son, Lester, and one daughter, Betty Lou, and two grandchildren, all of Ada.

A. M. Butts, M.D.

1871-1948

A. M. Butts, M.D., pioneer Holdenville physician, died July 12 after being in ill health for about two years.

He received his medical degree from Vanderbilt University and began practice in Alma, Ark., coming to Holdenville in 1905.

Active in all civic organizations, he was a charter member of the Holdenville Rotary club.

He is survived by his widow of the home, two daughters, Imogene Mayfield, M.D., and Mrs. Jessie Steen; two sisters; and four grandchildren.

Euel Park Hathaway, M.D.

1903-1948

Euel Park Hathaway, M.D., Lawton physician since 1933 and director of the city-county health department died July 13 after a week's serious illness. Death was attributed to cirrhosis of the liver. He had been in ill health since he suffered a previous severe attack in January, 1947.

He was graduated from the University of Oklahoma Medical School and interned at Wesley Hospital, Okla-

homa City. He practiced medicine and was an instructor in urological work at the University Hospital until 1933.

Surviving in addition to the widow are two daughters, Gwendolyn, 11, and Marcia Ann, 6, his father, A. H. Hathaway, M.D., Mountain View; a brother, James E. Hathaway, Cheyenne, Okla.; and a sister, Mrs. James Johuson, Weatherford.

A Resolution Expressing Profound Regret At the Loss of Our Member, Dr. V. C. Tisdal

WHEREAS, an all-wise and all-powerful Creator has removed from our midst a man who has served his community, his state and his profession with tireless energy, courage and devotion; and

WHEREAS, realizing the immensity of loss that the people of Oklahoma have sustained, and realizing also the inadequacy of language to express in full measure our sorrow or sense of loss, the Oklahoma State Board of Health wishes to state publicly their feeling of loss of a fellow-member in the death of V. C. Tisdal, M.D.

THEREFORE, The Oklahoma State Board of Health, taking note of the life and achievements and unequalled services of their departed member;

BE IT RESOLVED that we bear earnest and official testimony to the life of V. C. Tisdal, M.D.; and

BE IT FURTHER RESOLVED, that we renew our allegiance and pledge our unstinted and loyal support to the man who succeeds our departed member.

NOW THEREFORE, we request that the Resolution be incorporated into the minutes of this meeting and that a copy be sent to the members of the family and a copy also be sent to the Oklahoma State Medical Association.

Bert Loy, Secretary

C. R. Rountree, M.D., Chairman

MEET OUR CONTRIBUTORS

E. H. Coachman, M.D., Muskogee, is the author of "The Association of High Blood Pressure, and Increased Pulse Rate As a Manifestation of Hyperglycemia in Chronic Eye, Ear, Nose and Throat Conditions" in this issue of the Journal. Dr. Coachman is a graduate of the University of Michigan and limits his practice to E.E.N.T. He is a member of the American Academy of Ophthalmology and Otolaryngology and has been certified by the American Board of Otolaryngology.

F. D. Sinclair, M.D., F.A.C.S., Tulsa, wrote "Vaginal Hysterectomy" in this issue. He was graduated from Johns Hopkins in 1930. He limits his practice to obstetrics and gynecology and has been certified by the American Board of Obstetrics and Gynecology.

I. F. Stephenson, M.D., Alva, is the author of "Ectopic Pregnancy" in the September Journal. Dr. Stephenson was graduated from the University of Oklahoma School of Medicine and practices general surgery and medicine.

Vincent Vermooten, M.D., Dallas, Texas, is the author of "Injuries of the Urethra, Their Diagnosis and Care"

in this Journal. Dr. Vermooten was one of the guest speakers at the annual meeting and is professor of urology at Southwestern University School of Medicine.

PROFESSIONAL ETHICS COMMITTEEMAN NAMED

Clyde N. Kemery, general manager of the Oklahoma City Better Business Bureau, was recently appointed to the newly created Professional Ethics Committee of the Association of Better Business Bureaus. This committee has for its purpose the investigation and correction of unethical professional practices. In performing this service the Better Business Bureaus will work with the professions just as they are now working with reputable business firms in improving business practices and fighting misrepresentation, deception and fraud.

Druggists and the medical profession are urged by the Federal Security Agency's Food and Drug Administration to return all stocks of Siliform Ampuls to the manufacturer, The Heilkraft Medical Company, Boston, Mass. This injection drug, which should be sterile, is potentially dangerous, since samples collected on the market contain living organisms.

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is much more common than is generally realized."*

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- 4 DRYCO with whole milk—fresh, evaporated or dried—and carbohydrate (*high protein, intermediate fat, high carbohydrate*).
- 5 DRYCO with skim milk—fresh or dried (*high protein, exceptionally low fat, low carbohydrate*).
- 6 DRYCO with skim milk—fresh or dried—and carbohydrate (*high protein, exceptionally low fat, high carbohydrate*).

*A.M.A.: *Handbook of Nutrition*, Chicago, 1943.

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BOOK REVIEWS

THE HEALTHY HUNZAS. J. I. Rodale. 260 pages. Emmaus, Pa.: Rodale Press, 1948.

This beautifully illustrated volume of 260 pages sets forth many generally accepted principles having to do with the soil and its food products. Yet it poses numerous difficult questions and assumes the truth of many unproved theories. The story exhibits a relatively primitive, remarkably healthy people living on the northwest border of India almost in the shadow of Tibet. The author has never been in this part of the world and admits that his story represents a fabric woven from threads of knowledge gained from the experience of others.

The authenticity of certain theories and statements contained in the book are naturally called into question by the intelligent reader not alone because of this lack of firsthand knowledge but because so many of the author's premises are untenable and so many rather dogmatic statements unproved. In Chapter I the author discussing the lecture by Sir Robert McCarrison states that "Twenty-five years have elapsed since that lecture was delivered in smoky Pittsburgh, but as yet no medical expedition has set forth to ascertain the cause of the Hunzas' dynamic health."

After making this frank acknowledgement of the need of a medical expedition to ascertain the cause he writes as though he had made the discovery by weaving the threads of his second hand information into his own theories.

Time will not permit detailed references to all the inconsistencies discovered in the story but the following will serve as an example. As an argument that whole wheat bread prevents sterility in Hunza women he quotes Doris Grant *Your Daily Bread* "a young friend had been trying for a whole year to produce a baby. About three months ago she came to live with me, since when she has had, probably for the first time in her life, a sufficiency of vitamin E and B due to the fact that our bread is home-made of 100 per cent stone-ground wheat, containing all the germ. Now the miracle has happened much to her surprise and joy. I told her husband, jokingly, the other day: 'You needn't look so proud of yourself, and don't imagine that you alone are responsible! At least half the honour is due to my home-made bread!'" The reviewer wonders why not plenty of water to assure high tide for the ambitious gondolier and the backward ovum.

There is also an argument that the Hunza bread prevents cancer. Granting that there is no cancer among the Hunzas we still need proof that bread is the inhibiting factor. Why not the sour goat butter, the apricot, the stichwort and sorrel or the Thibeton tea? Having called attention to the fact that the book contains many questionable claims, it must be conceded that the work apparently represents a sincere effort to interest the reader in physical welfare and its relationship to soil conservation. A most worthy ambition. Though there may be great virtue in his discussion of compost vs. chemical fertilizer, the few case reports and testimonials are not convincing to the average physician who knows it requires thousands of cases to prove what may seem to be a scientific observation and then much carefully planned scientific investigation to determine the wherefore. Its perusal should arouse curiosity, stimulate investigation and encourage a more healthful manner of living—Lewis J. Moorman, M.D.

BRIEF PSYCHOTHERAPY. Edited by: Bertrand S. Frohman, M.D. Philadelphia: Lea and Febiger, 1948. 250 pages. Price \$4.00.

Brief psychotherapy is clearly and logically explained by Dr. Frohman in his brief, but very pointed book just off the press. We find that the therapeutic measures discussed are eclectic in nature and do not adhere to any particular school or cult of philosophy in psychiatry. Mental mechanisms are approached in plain and understandable terms, and nowhere in the book do we find the author taking recourse to the psychiatric jargon which makes so many books on psychiatry dull or confusing to read.

Therapy employed by the author is primarily the expressive type in which the patient's feelings, past history, and reactions to his environment are learned and discussed; though a practical approach is taken so that only a few interviews are required to reach the source of the average neurotic problem. The neuroses are considered, and the various types of neuroses are briefly discussed.

Chapter V is devoted to those particular emotional disorders most frequently encountered in the various medical specialties, and the gastro-intestinal disorders, the urologic disorders, and the disturbances in sex conduct are given ample consideration.

Therapy of all types are evaluated, both expressive and suppressive measures being employed by the author. Use and limitations of hypnosis and narcosynthesis is plainly shown; and electric shock, or electro-convulsive therapy, is clearly to be reserved for those severe cases in which it must be used in conjunction with a more realistic psychotherapeutic approach.

Practitioners of medicine will find this 250 page book a valuable adjunct to the practice of medicine.—Moorman P. Prosser, M.D.

THE BATTLE OF THE CONSCIENCE. Edited by: Edmund Bergler, M.D. Washington Institute of Medicine, 1948. Price \$3.75.

This is a treatise on the development of the super-ego in purely Freudian form and vocabulary, with typical subordination of all of life's motivating factors to sex and penis worship. This unfortunate emphasis would seem not only to justify, but almost glorify overt homosexuality, and sets the stage for the author's last chapter entitled "Let Your Conscience Be Your Guide." As is customary in such productions, conclusions to prove the point are drawn with quasilogic.

Some useful points in the development of conscience are brought out, though the practical applications, thereof, are on a purely hypothetical basis, and as the author admits in his chapter on criminality, and pure "supposition." His defenses against criticism of his reasonings, or lack thereof, are the customary ones of psychoanalysis, e.g., only the initiated can understand.

The chief value of the book lies in its repetitive definition and explanation of mental mechanisms in which free usage of clinical examples clarifies this important phase of thinking and behavior responses. However, the book suffers and becomes somewhat heavy reading because of the very repetitiousness.

To those especially interested in the emotional responses of depression, the book offers some excellent source material and reasonable conclusions.—Moorman P. Prosser, M.D.

PRACTICAL BACTERIOLOGY, HEMATOLOGY AND PARASITOLOGY. E. R. Stitt, M.D., Ph.M., Sc.D., L.L.D., Paul W. Clough, M.D., Sara E. Branham, M.D., Ph.D., Sc.D., and Contributors. Tenth Edition. The Blakiston Company, 1948.

This book is one of the oldest standard books of laboratory diagnosis. It has been in existence for approximately 40 years. I have had a long personal knowledge of this book. Dr. Gayfree Ellison first introduced me to the book in 1920, later as a sophomore medical student, 1924, it was the text used by Dr. L. A. Turley in his Parasitology course. Since the first edition was published in 1909 it has been recognized as one of the outstanding laboratory diagnosis books. The authors and contributors are all recognized authorities in their fields. Stitt has long been recognized as a leading laboratory diagnostician.

This book is an indispensable book for every medical laboratory. It is also a very valuable book for the practicing physician. Most laboratory books concentrate on laboratory methods and stop there. This book is of great value because it correlates the laboratory findings with the clinical findings and thus makes possible a more accurate interpretation of the results.

This book covers bacteriology in its widest sense, hematology, parasitology, urinalysis, gastric contents, stool examinations, methods of determining endocrine deficiencies and vitamin deficiencies.

Only a relatively few pages (about 30) of the nearly 1000 are taken up with endocrines and vitamins, however it is a timely addition because it may help to place hormone and vitamin therapy on a more rational basis.

The book deplores the indiscriminate use of vitamins: "There is no clear cut evidence which indicates that the vitamins are of therapeutic value in diseases uncomplicated by vitamin deficiencies. The current exaggerated interest in vitamins has produced remarkably little acceptable evidence for their clinical value except in conditions of definite avitaminosis. There is, on the other hand, a dangerous tendency to apply vitamins to the treatment of undiagnosed complaints having their counterpart in frank deficiency disease."—H. D. Moor, M.D.

INTERNAL MEDICINE IN GENERAL PRACTICE.

Robert Pratt McCombs, B.S., M.D., F.A.C.P. Second Edition. 741 pages. 122 illustrations. Philadelphia and London, W. B. Saunders Company, 1947. Price \$8.00.

Modern medical texts and reference books are largely written in sections by various collaborators. To find one by a single well qualified author is refreshing—to read it is to realize that in this clear, concise and well written volume is a great store of valuable clinical material. Doctors who are still students of medicine will find it a helpful reference book. Medical students will find great value in the author's reasonable and well ordered method of presentation of subject matter.

Charts are clear and supplement the chapters admirably and none is counted superfluous. References at chapter ends lead one to more detailed material in modern journals or decent monographs.

The first section on "Fundamentals of Diagnosis" more than compensates for the price of the volume. The reviewer feels as if he has had a good postgraduate review and gained information of which he was ignorant before.—Ray H. Lindsay, M.D.

MODERN CLINICAL PSYCHIATRY. Arthur P. Noyes, M.D., Superintendent Norristown State Hospital, Norristown, Pennsylvania. Cloth. 525 pages. Philadelphia: W. B. Saunders Company, 1948.

This is a well written book on basic neuropsychiatry by a recognized authority in his field. In keeping up with recent developments and progress, the new third edition has been changed considerably from the previous one, to include various observations on mental reactions during the stress of war time. More reference is made to the psychosomatic expressions and in addition, three completely new chapters have been written: Psychotherapy, Shock and Other Physical Therapies, and Child Psychiatry.

The first four chapters concern themselves chiefly with a discussion of the mind and its development and purpose, and a review of the psychodynamics of behavior; the various mental mechanisms are well presented and in a manner easily understood. Lastly in this group of chapters there is taken up a rather controversial, much discussed and disputed subject, that of the causes and nature of mental disease. The author points out that persons may well become ill from disturbed human relationships and that we as physicians should not be so prone to approach personality disorders in the same category as organic diseases, but rather should study the individual as a whole, as a biologic unit living in an environment that is essentially social in nature, and thereby being subjected to certain traumatic experiences in that environment. It should be pointed out that there is probably no one factor or experience which is directly responsible insofar as etiology is concerned, but that there has undoubtedly been many emotionally toned incidents with considerable stress placed upon each, that gives us the end result of mental illness.

In the remainder of this book are excellent discussions of the psychoses, both organic and functional, the psychoneuroses, the psychopaths and mental defectives. It is of particular interest to note the comments made by the author concerning Alcoholics Anonymous and its contribution toward the restoration of this particular type of mentally ill individual. Dr. Noyes feels, and I quote, "this program, although very heavily weighted with an unrealistic optimism, has constructively utilized many principles of group psychotherapy." He further states, "Its methods of thinking are naive but have doubtless contributed to its success." This program of rehabilitation, now 13 years of age, may have an optimism which is unrealistic and may promulgate thinking processes which are naive, but nevertheless it is the only form of therapy thus far designed for the treatment of these individuals which can boast of a percentage of restoration reaching well into the seventies. The chapter on the shock therapies is well presented and is a most worthwhile adjunct to the previous edition, with its discussion of the technique, frequency, indications, contraindications, complications and results.

In general it may be stated of this volume that the subject material is up to date, set forth in an excellent fashion and could well be adopted by medical universities as their textbook in beginning psychiatry.—Milford S. Ungerman, M.D.

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J. Hartwell Dunn, M.D., M.S. in nrology, announces the opening of his offices at 416 N.W. 13th, Oklahoma City.

D. L. Edwards, M.D., announces the assoeciation of George B. Ely, M.D., as chief of the ear, nose and throat department of Glass-Nelson clinic, Tulsa. Dr. Edwards will limit his practice to ophthalmology.

B. C. Chatham, M.D., has joined the staff of the Chickasha hospital. He is a graduate of Vanderbilt University Medical School.

R. W. Lewis, M.D., F. W. Coggins, M.D., and W. H. Smith, M.D., Granite, were the examining physicians at a pre-school clinic held at the Lewis Hospital.

Marrin B. Hays, M.D., is now associated with J. B. Darrough, M.D., Vinita. Dr. Hays, wife, Carolyn Hays, M.D., will also assist in the office. Both are gradnates of the University of Oklahoma School of Medicine.

J. Howard Baker, M.D., has recently moved from Eufaula to McAlester where he has established his practice.

Claude S. Chambers, M.D., Seminole, has been named to the board of control for the Will Rogers Memorial fund at the University of Oklahoma.

E. E. Fair, M.D., Oklahoma City, was recently the subject of an article in the Heavener newspaper on young people of Heavener who have "made good" in their profession or field of work. Dr. Fair is the son of E. N. Fair, M.D., Heavener.

A. N. Deaton, M.D., Wewoka, is building a new clinic which he expects to have in use by the middle of September.

John L. Day, M.D., has moved to Woodward, Oklahoma, after retiring as head of the Northwestern Oklahoma Hospital at Fort Supply.

ANSWERS REPORTED ON INDIANA SURVEY

On a recent questionnaire sent out by the Indiana State Medical Societies to all state medical association secretaries the following answers were received from 47 state societies:

Sixteen offered health and accident insurance for their members by commercial carrier, one answered yes only, 29 did not offer it and no answer was given by one society.

To the question on malpractice insurance coverage for members, 18 answered yes, with commercial carrier, five answered yes only, and 24 replied no.

Eighteen of the societies provided legal connsel for members sued for malpractice.

A total of 43 societies pay expenses of delegates to the A.M.A. house of delegates' meeting, three do not and one pays the expenses only to interim sessions.

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(Editorial Notes—Personal and General)

Dr. C. L. Rogers, of Alva, has recently relocated at Dacoma.

Dr. A. S. Risser, Blackwell, is spending a vacation at Hollister, Mo.

Dr. H. D. Murdock, of Tulsa, is spending his vacation in California with his family.

Dr. C. J. Fishman, Oklahoma City, has removed his offices to 132 West 4th Street.

Dr. H. W. Ford, Tulsa, and family are touring to the Pacific Coast, through the Grand Canyon of Arizona.

Dr. J. Hutchings White, and wife, Muskogee, are spending the rest of the summer in Minnesota and Canada.

Dr. Chas. F. Walker, Grove, mourns the loss of his Dodge car. It is a 1923 model, engine number 913302 and license number is 232, 887.

Dr. E. K. Witcher, Pawhuska, and brother, Dr. Robert Witcher, Chicago, left for Scotland, via Montreal. While in Scotland, they will attend several clinics.

Dr. O. E. Templin, of Alva, who holds a commission as Captain in the Reserve Corps, spent two weeks in July at Fort Sill, and has been recommended for promotion.

MEDICAL SCHOOL

Dr. John F. Gaines (Med '47) is located at the St. Louis County Hospital, Clayton, Missouri, as a resident in medicine.

Dr. William J. Hemphill (Med '47) and family have settled in Eugene, Oregon, where Dr. Hemphill is in practice with his father.

Dr. James W. Murphree (Med '47) is now serving a residency in Roentgenology at St. Joseph's Hospital in St. Paul, Minnesota.

Having completed an internship at Colorado General Hospital, Denver, Colorado, *Dr. Darwin L. Richardson*

(Med '47) is in general practice in Cody, Wyoming.

Dr. John A. Siebs (Med '47) is a resident at Mercy Hospital, Denver, Colorado.

Dr. Douglass E. Wilson (Med '47) has a residency in Surgery at St. John's Hospital, Tulsa, Oklahoma, following his internship at the Indiana University Medical Center, Indianapolis, completed this July.

Dr. Martin Berger (Med '47) is now serving a residency in Surgery at Providence Hospital, Seattle, Washington.

MEDICAL ABSTRACTS

CONGENITAL MACROGLOSSIA. H. Glenn Bell, M.D., and R. Gordon Millar, M.D. *Surgery*, 24:1:125-134 (July) 1948.

"Although a variety of inflammatory and neoplastic processes will increase the size of the tongue in part or in whole, the term macroglossia has come to be reserved for two distinct entities. One is a lymphangiomatous enlargement and the other a true hypertrophy of the lingual muscle fibers."

The authors then discuss the embryology, histology and subsequent pathology of these conditions. They do not feel that radiation is of any permanent benefit to these cases and discuss the pre-operative care, the surgical technique used and stress the post-operative care.

This article presents another instance of what can be accomplished with modern surgical technique, in the use of intra-tracheal anesthesia, the electro cautery, free use of fluids and the after care with anti-biotics.—John F. Burton, M.D.

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*Snyder, M. L., Kiehn, C. L. and Christopherson, J. W.: Mil. Surgeon, 97: 380, 1945. • Shipley, E. R. and Dodd, M. C.: Surg., Gynec. & Obst., 82: 366, 1947 • Mays, J. L.: J. Med. Assoc. Georgia, 36: 263, 1947. • Curtis, L.: Surg. Clin. N. America, 1466 (Dec.) 1947.

OFFICERS OF COUNTY SOCIETIES, 1948

COUNTY	PRESIDENT	SECRETARY	MEETING TIME
Alfalfa.....	L. T. Lancaster, Cherokee	C. E. Cook, Cherokee	Last Tues. each Second Month
Atoka-Bryan-Coal- Johnston.....	Charles D. Dale, Atoka	A. T. Baker, Durant	Second Tuesday
Beckham.....	T. J. McGrath, Sayre	J. B. McGolrick, Erick	Third Thursday
Blaine.....	Fred Perry, Okeene	Virginia Curtin, Watonga	Third Thursday
Caddo.....	Joseph Henke, Hydro	Edward T. Cook, Jr., Anadarko	Subject to Call
Canadian.....	J. N. Goldberger, El Reno	Jack W. Myers, El Reno	Second Tuesday
Carter.....	C. D. Cunningham, Ardmore	Roger Reid, Ardmore	First Tuesday
Cherokee.....	P. H. Medearis, Tahlequah	R. K. McIntosh, Jr., Tahlequah	
Choctaw-McCurtain- Pushmataha.....		Fred D. Switzer, Hugo	
Cleveland.....	Phil Haddock, Norman	James F. Hohl, Norman	Fourth Thursday
Comanche.....	Byron W. Aycock, Lawton	E. Stanley Berger, Lawton	Second Tuesday
Cotton.....	G. W. Baker, Walters	Mollie Seism, Walters	Third Friday
Craig.....	C. P. Chumley, Vinita	J. M. McMillan, Vinita	
Creek.....	P. K. Lewis, Sapulpa	Louis A. Martin, Sapulpa	Second Tuesday
Custer.....	J. G. Wood, Weatherford	Edgar A. deMeules, Clinton	Third Thursday
Garfield.....	J. Wendell Mercer, Enid	Roscoe C. Baker, Euid	Fourth Thursday
Garvin.....	Carl Steen, Pauls Valley	John R. Callaway, Pauls Valley	Wed. before 3rd Thur.
Grant.....	I. V. Hardy, Medford	F. P. Robinson, Pond Creek	
Grady.....	L. E. Woods, Chickasha	Wesley W. Davis, Chickasha	
Greer.....	Fred Sellers, Mangum	J. B. Hollis, Mangum	
Harmon.....	R. H. Lynch, Hollis	C. N. Talley, Hollis	First Wednesday
Haskell.....	William S. Carson, Keota	N. K. William, McCurtain	
Hughes.....	L. A. S. Johnston, Holdenville	Paul Kernck, Holdenville	First Friday
Jackson.....	J. M. Allgood, Altus	J. Harold Abernathy, Altus	Last Monday
Jefferson.....	H. A. Rosier, Waurika	O. J. Hagg, Waurika	Second Monday
Kay-Noble.....	Glenn Kreger, Tonkawa	E. C. Mohler, Ponca City	Second Thursday
Kingfisher.....	H. Violet Sturgeon, Hennessey	Henry C. Trzaska, Hennessey	
Kiowa.....	R. F. Shriner, Hobart	J. B. Tolbert, Mt. View	
LeFlore.....	John H. Harvey, Heavener	Rush L. Wright, Poteau	
Lincoln.....	Jack Mileham, Chandler	C. W. Robertson, Chandler	First Wednesday
Logan.....	E. W. Lehew, Guthrie	J. L. Lehew, Guthrie	Last Tuesday
Mayes.....	E. H. Werling, Pryor	Paul B. Cameron, Pryor	
McClain.....	I. N. Kolb, Blanchard	W. C. McCurdy, Jr., Purcell	
McIntosh.....	J. Howard Baker, Jr., Eufaula	W. A. Tolleson, Eufaula	Third Thursday
Muskogee-Sequoyah- Wagoner.....	George L. Kaiser, Muskogee	Eugene M. Henry, Muskogee	First Tuesday
Northwestern.....	Joe L. Duer, Woodward	C. W. Tedrowe, Woodward	2nd Thurs. Even Mo.
Okfuskee.....	A. S. Melton, Okemah	M. L. Whitney, Okemah	
Oklahoma.....	W. W. Rucks, Jr., Oklahoma City	John F. Kuhn, Oklahoma City	Fourth Tuesday
		Mrs. Muriel Waller, Exec. Secty.	
Okmulgee.....	J. C. Matheney, Okmulgee	S. B. Leslie, Jr., Okmulgee	Second Monday
Osage.....	C. S. Stotts, Pawhuska	William A. Loy, Pawhuska	Third Thursday
Ottawa.....	F. L. Wormington, Miami	W. Jackson Sayles, Miami	Second Thursday
Payne-Pawnee.....	Clifford M. Bassett, Cushing	C. W. Moore, Stillwater	Third Friday
Pittsburg.....	Homer C. Wheeler, McAlester	Edward D. Greenberger, McAlester	First Wednesday
Pontotoc-Murray.....	W. T. Gill, Ada	Ollie McBride, Ada	1st and 3rd Saturday
Pottawatomie.....	Jack W. Baxter, Shawnee	F. C. Gallaher, Shawnee	Third Wednesday
Rogers.....	P. S. Anderson, Claremore	M. E. Gordon, Claremore	
Seminole.....	Claude Chambers, Seminole	Mack I. Shanholtz, Wewoka	Third Wednesday
Stephens.....	Fred Patterson, Duncan	W. R. Cheatwood, Duncan	Third Wednesday
Texas.....	Daniel S. Lee, Guymon	E. L. Buford, Guymon	
Tillman.....	G. A. Tallant, Frederick	O. G. Bacon, Frederick	Second and Fourth Monday
Tulsa.....	Victor K. Allen, Tulsa Medical Arts Bldg.	John G. Matt, Tulsa	
Washington Nowata.....	L. B. Word, Bartlesville	Mr. Jack Spears, Exec. Secty.	
Washita.....	A. H. Bungardt, Cordell	C. L. Johnson, Jr., Bartlesville	Second Wednesday
Woods.....	R. A. Whiteneck, Waynoka	Aubrey E. Stowers, Sentinel	Last Tuesday
		W. F. LaFon, Alva	Odd Months

COUNCILORS AND VICE-COUNCILORS

COUNCILORS AND VICE-COUNCILORS

District No. 1: Alfalfa, Beaver, Cimarron, Dewey, Ellis, Harper, Texas, Woods, Woodward—Daniel B. Ensor, M.D., Hopeton (C) 1950; O. C. Newman, M.D., Shattuck (V-C) 1950.

District No. 2: Beckham, Custer, Greer, Harmon, Jackson, Kiowa, Roger Mills, Tillman, Washita—L. G. Livingston, M.D., Cordell (C) 1951; O. C. Standifer, M.D., Elk City (V-C) 1951.

District No. 3: Garfield, Grant, Kay, Noble, Pawnee, Payne—Bruce Hinson, M.D., Enid (C) 1949; R. W. Choice, M.D., Wakita (V-C) 1949.

District No. 4: Blaine, Canadian, Cleveland, Kingfisher, Logan, Oklahoma—Carroll Pounders, M.D., Oklahoma City (C) 1950; Joe Phelps, M.D., El Reno (V-C) 1950.

District No. 5: Caddo, Carter, Comanche, Cotton, Grady, Jefferson, Love, Stephens—J. Hobson Veazey, M.D., Ardmore (C) 1951; O. J. Hagg, M.D., Waurika (V-C) 1951.

District No. 6: Creek, Nowata, Osage, Rogers, Tulsa, Washington—Ralph McGill, M.D., Tulsa (C) 1949; P. S. Anderson, M.D., Claremore (V-C) 1951.

District No. 7: Garvin, Hughes, Lincoln, McClain, Murray, Okfuskee, Pontotoc, Pottawatomie, Seminole—Clinton Gallaher, M.D., Shawnee (C) 1950; Ned Burleson, M.D., Prague (V-C) 1950.

District No. 8: Adair, Cherokee, Craig, Delaware, Mayes, Muskogee, Okmulgee, Ottawa, Sequoyah, Wagoner—Shade Neely, M.D., Muskogee (C) 1951; W. J. Sayles, M.D., Miami (V-C) 1951.

District No. 9: Haskell, Latimer, LeFlore, McIntosh, Pittsburg—Earl Woodson, M.D., Poteau (C) 1949; E. H. Shuller, M.D., McAlester (V-C) 1949.

District No. 10: Atoka, Bryan, Choctaw, Coal, Johnston, Marshall, McCurtain, Pushmataha—W. K. Haynie, M.D., Durant (C) 1950; W. W. Cotton, M.D., Atoka (V-C) 1950.

THE JOURNAL

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EDITORIALS

OKLAHOMA CITY CLINICAL SOCIETY

The Oklahoma City Clinical Society is making its eighteenth stand, beginning October 25. It is a matter of regret that the dates conflict with those of the Southern Medical Association which meets in Miami. The dates for the Clinical Society were set before those of the Southern which usually meets in November. The Southern, however, accepted Miami's invitation and found that the only dates during which there would be adequate hotel facilities were those already set up for the Clinical Society. We regret too that we shall miss Mr. Loran's usual visit.

The program of the Clinical Society will be of the same caliber as of previous years. A clinical pathological conference will again be held. The case will be discussed by Dr. John B. Youmans and Dr. Lawrence Fallis. Dr. Howard Hopps, professor of pathology, University of Oklahoma School of Medicine, will give the pathological study. Readers of the Journal are familiar with the excellent conferences conducted by Dr. Hopps.

Oklahoma has a wealth of material other than medicine that the Clinical Society might draw on. It is hoped that in the future our visitors will, through the Clinical Society, have an opportunity to hear something of our Symphony, or hear something from the music and dramatic departments of Oklahoma City University and the University of Oklahoma. One of the bright spots in the memory of Oklahoma City medical meetings is the pop concert put on by Victor Alessandro and the Symphony for the Southern Medical meeting in 1938.

The Clinical Society extends to all physicians who are members of their county societies, a cordial invitation to attend the meeting. There will be excellent instruction in the lecture rooms and at the luncheons. Much that is new and useful can be seen and studied at the exhibitors' booths. The evening entertainment will be, if anything,

better than on previous years. You will meet old friends and make new ones, so come along.

WHERE NOW?

The President's program to socialize medicine based on Mr. Ewing's report, was no surprise. The Republicans may feel impelled to make a counter offer. Mr. Dewey is the only candidate of a major party who has expressed himself as being against compulsory health insurance. Mr. Warren's attitude is well known and others in the Republican fold are not unfavorable. Representatives of the medical profession and many lay organizations have expressed themselves blue in the face and have, in a large measure, prevented the passage of any serious reform to date. Senator Donnell, to whom we are all grateful, did his part. One of the real legs that has any chance of sustaining our position, however, is Blue Cross and Blue Shield. If we can develop a national contract and greatly extend our coverage before Congress gets around to serious consideration of a reform bill, we will be in a position to prove that it isn't necessary. It is hoped that some of the major insurance companies in the field will decide to back us, although a little competition is even good for Blue Cross and Blue Shield.

Of much greater importance than what happens to medicine is what is happening to the country if a Murray-Wagner-Dingle bill is passed. It means that the people are a step nearer dependence on a central government, which is at the same time becoming more and more powerful as are its agents. The farmers have already sold some of their birthright and the politicians are bidding for more of it.

A serious handicap to organized medicine in the President's proposal, is the plan for a subsidy of the Medical Schools. This will find favor with the educators who are feeling the pinch of the shrinking dollar, and it will find favor with the fulltime faculty men who feel that they are underpaid compared to the

man in private practice. All of these teachers are a tremendous influence among medical men. If any unit of our democratic life should see fit to so prostitute itself because of the need or desire for money, statism would be here now.

The supreme court has ruled that the Federal government has a right to control what it subsidizes. One can imagine teachers of economics, of history, of philosophy, of engineering and of law being quite happy with the improved status of teachers and departments of medicine. One can visualize the time when a government department head will tell the department of economics, philosophy and history, what to teach and how to teach it. If an instructor is paying \$100 a month on a car, \$150 a month on a house, \$75 a month on its furnishings and \$100 a month on an insurance program which his new affluence has allowed, he isn't apt to refuse to do what he is told. Believe me, there will be members of his class only too anxious to inform on him if he strays from the specified path.

One may argue that the state medical schools are already subsidized. It is, of course, so, but the state as a unit is small compared to the federal government and we at least feel that our representatives in the legislature have some control. Faculty members in Oklahoma have been discharged for subversive leanings. In addition our schools are in competition with schools and faculties of schools which are not subsidized.

Unfortunately the schools who need help most are those which are free of any political control and are dependent on endowments, contributions and fees for tuition. It is hoped that these schools will tighten their belts and have no part of the handout with the string on it.

MEDICINE OF THE YEAR

Elsewhere in this issue of the Journal is an announcement of a new review of medicine to be called "Medicine of the Year." The editor-in-chief is John B. Youmans who is dean of the medical college of the University of Illinois. Dr. Youmans has had wide experience as a teacher and in the overall problems of medical education. He is an internist of no mean ability and is to be a guest speaker at the Clinical Society this

year. The main contributors of the four major subjects, Medicine, Surgery, Pediatrics and Obstetrics, are well known to Oklahoma doctors from their lectures here at the State meetings and at the Clinical Society. They are Dr. Hugh J. Morgan, medicine; Dr. H. Warren Cole, surgery; Dr. Henry G. Poncher, pediatrics; and Dr. Frank Whitaker, obstetrics and gynecology.

One of Dr. Youmans' ambitions has been to devise ways that the man already in practice could receive postgraduate training. One project which has already borne fruit is the *American Practitioner* of which he is editor. This journal is designed for the man in the field and not the research worker and it has so far discharged its function admirably. Medicine of the Year will have a similar purpose and will review for the man of limited time and material, the progress of significance to him during the previous year. It is hoped that enough of Oklahoma's doctors subscribe to it and find it valuable enough to insist that the House of Delegates and the Council make it a supplement of the State Journal for free to all the members.

TEMPORARY REMISSIONS IN ACUTE LEUKEMIA IN CHILDREN PRODUCED BY FOLIC ACID ANTAGONIST

Studies of bone marrow activity in leukemic patients treated with conjugates of folic acid (Teropterin and diopterine) suggested to Farber¹ that the leukemic process is accelerated by them and that antagonists to folic acid might be employed in the treatment. The result of such a study in five children is the subject of a report.

The folic acid antagonist employed in these children was four-aminopteroyl-glutamic acid (aminopterine). The observations showed that the aminopterine had a marked effect upon the leukemic bone marrow and upon the immature cells in the peripheral blood and very probably on leukemic deposits in the viscera as well. The authors emphasize that the substance is toxic and that no evidence points to it as a cure but that the studies do justify a search for other antagonists of folic acid that are less toxic and perhaps even more powerful than aminopterine.

1. Farber, Sidney, et al: New Eng. J. Med. 238:787 (June 3) 1948.

SCIENTIFIC ARTICLES

PAIN FROM THE PHYCHIATRIST'S POINT OF VIEW*

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Pain in one or more of the body segments is the commonest complaint of patients seeking medical aid. In spite of this familiarity with complaints of pain in your patients, and the fact that you have undoubtedly had some personal experience with the sensation, there is probably no one that could accurately and completely define it. If so, I trust you will do so after reading this article. In his excellent book on "Pain," Sir Thomas Lewis states in the preface: "Reflexion tells me that I am so far from being able satisfactorily to define pain of which I here write that the attempt could serve no useful purpose. Pain like similar subjective things is known to us by experience and described by illustration." Cannon in his book "Pain, Hunger, Fear and Rage" neatly evades the issue by not defining pain at all and the word is usually placed in quotations. Best and Taylor in their text of Physiology fail to define the word but speak of it at length and talk of its properties, its sensory endings, protective qualities and so forth. Dorland's Medical Dictionary defines it very concisely as distress or suffering and gives a secondary definition as a rhythmical contraction of the uterus. Webster gives four alternate definitions, the first being punishment and penalty; the second, an affectation or feeling proceeding from a derangement of functions, disease or bodily injury; the third, distressing uneasiness of mind or grief; and the fourth, throes of childbirth. Starling's textbook of physiology defined it as follows, "When the pressure of a hard object on the skin is increased beyond that necessary to evoke a tactile sensation, at a certain pressure the quality of sensation changes and becomes painful. For the evolution of the race as well as for the preservation of the individual, this pain sense is all important; it is the expression in consciousness of the reflexes of self-preservation which can be evoked in the spinal animal by stimuli which are noxious—thus when a sharp point is

pressed on the skin the sensation becomes painful just before the pressure is sufficient to cause penetration." Leonardo Bianchi has defined pain as "Pain may be interpreted as an interference with the process of nutrition in the organ." McLeod has described pain as: "Noxious stimuli giving rise to an exceedingly impelling sensation and to reflexes which can dominate over any others which may be set up at the same time." Head, who has probably written more extensively on pain than any other individual states "The stimuli of daily life are not simple, they are extremely complex and give rise to a multitude of diverse impressions. They must be resorted and regrouped; some are facilitated, other repressed before the final sum is presented to consciousness." Head then proceeds to describe a rather complex system of protopathic and epicritic sensations, without considering the factor of attention of the subject, the numerous environmental settings in which the sensations are perceived and the modifications which the overall situation has upon the individual's perception of pain and his response to it. For example, within your own experience you may recall having noted spots of blood on a clean shirt or on paper on your desk and after investigation of your anatomy discovering a small cut or abrasion on a finger or hand. Having been detected, the abraded area usually begins to sting or smart, although until that time you were completely unaware of it. Then if you attempt to reproduce a similar lesion on an adjacent finger or hand the intentionally induced lesion would be more painful, although up to this point you still don't know when or how you obtained the primary injury. An interesting observation of a similar type was reported in a bulletin of the U. S. Army Medical Department in 1946. In this study of over 200 severely wounded soldiers, the authors report the greatest incidence of pain in abdominal wounds, but found that the majority of the patients complained of very little or no pain at all. Severe pain was present in only 23 per cent of these patients.

*Presented before the Section on Medicine at the Annual Meeting of the Oklahoma State Medical Association, May 17, 1948.

In discussing this low incidence of pain, they make the following statement. "Pain is an experience subject to modification by many factors; wounds received during strenuous physical exercise during the excitement of games often go unnoticed. The same is true of wounds received during fighting and during anger. Strong emotions can block pain." They found that some of their most excited patients who were complaining of severe pain could be entirely relieved by small doses of sodium amytal.

Head's concept of primitive or protopathic pain and the more highly developed discriminating or epicritic pain is the one commonly described in most textbooks but it has been severely criticized by other authors. For example, Walsche has expressed his opinion of a protopathic response as follows. "Such a creature, even if it could take the steps necessary to propagate its bewildered kind, which appears doubtful, could have no survival value, for on receipt of a stimulus which it could not localize, from a stimulating agent whose nature it had no means of discovering, it could respond only by curling up and micturating. Yet this is the animal that Head and Rivers present to us as our common ancestors." Livingston, who has written an excellent text on pain, uses the concepts of Head to explain the physiologic mechanisms of the particular cases, but goes on to state "Pain is a sensory experience that is subjective and individual." McCurdy speaks of pain as follows, "When one feels pain, then, it may be that one feels not merely the stimulus but the response as well. If one felt merely the stimulus he would be experiencing a pure sensation, that is a psychologist's myth. Only perceptions (sensations qualified by experience, by meaning) enter into consciousness. The interpretive quality which the word "Pain" implies may be the response, represented in consciousness as "pain." The definitions of some physiologists that pain is an interference with nutrition or a threat to self-preservation meets many objections from the physician's point of view. For example, if we took this as the definition of pain, then the proverbial dog passing peach seeds might shake, but not from pain, because this act does not threaten his self-preservation nor does it penetrate the skin nor interfere with his nutrition, but is rather a normal physiologic result of a dietary indiscretion. Neither does it explain the behavior of the child who will suck his thumb, with pleasure, to the point of ulcerating the skin, but who resists with screams

the vaccination done in the doctor's office. Similarly superficial lesions on the genitalia incurred during the excitement of sexual intercourse result in no interference with the pleasurable sensations but attempts to reproduce these artificially in the physician's office would result in violent attempts to escape. Observation and experiment have led to the formation of an aphorism known as "Heyman's Law," which states that simultaneous stimuli inhibit one another and stronger stimuli inhibit weak ones. One concludes that the concept of pain as a subjective experience altered somewhat by the circumstances under which the stimulus is received is much more practical from the clinician's point of view.

The following information from our own material tends to confirm and bear out this broader concept of painful stimuli. My own interest in the subject was stimulated by work done for the army at the McCloskey Hospital in conjunction with Col. Guy C. Randall, Col. Harry Morris and Col. Harry Blair. The work was done with a group of amputees with the purpose of making a survey of the patients' psychiatric reactions to amputating injury. This work has been reported elsewhere, but to me the most fascinating part of the work was the data on phantom sensations and phantom pain. My own experience prior to this study had been confined to amputees seen for insurance companies and in the course of trying to relieve patients of phantom pain. Most of the civilian cases coming to our attention were suffering from narcotic addiction or from very severe anxiety and depression as a reaction to their painful stimuli. Of the army amputees group studied, 2,284 were under observation, but shortage of time and personnel prohibited detailed psychiatric studies on all of them. The incidence of phantom sensations is not accurately known for the entire group but of the 2,284 patients, only eight complained of phantom pain. The most intensively studied group of these patients were 100 selected from the 2,284. These 100 were selected at random as being normal persons who were making a normal adjustment to their amputations. From this small group 95 of the 100 had phantom sensations, but only one of them interpreted his sensation as being painful while he was in the hospital. One hundred and fifty-two other patients who appeared to be making a normal adjustment in the hospital came to the clinic voluntarily seeking aid in solving some type of emotional

problem. Of this group, 137 had phantom sensations, but none interpreted the sensation as being painful. Sixty-one amputees were given detailed psychiatric study because of some violation of army regulations. In this group 55 had phantom sensation and four of them interpreted the sensation as being painful. Another group of 91 were examined because the orthopedic service thought they were suffering from some type of psychopathological reaction. Among this group 82 had some type of phantom sensation and three of the group interpreted the sensation as being painful. Thus, in the group of 404 patients studied intensively in the hospital only eight had what they considered to be painful sensations originating from the stump, and all eight of them showed very marked psychopathology. On the other hand, many patients with psychopathology and amputations did not have painful sensations in the stump. In an attempted follow-up study we found that one man who developed phantom pain while in the hospital had gone home, gotten his difficulties straightened out and the phantom pain had disappeared. Three others, pain free in the hospital, were having great difficulty in adjusting to the civilian world, in terms of family and occupational disturbances, and they had developed pain in their stumps. Another interesting observation in this group of patients was the fact that they all used similar terms to describe phantom sensations but certain of the patients described these sensations as being painful while others described them as sensations at times annoying but in no way interfering with their sleep or productive activity. The most frequent adjective used to describe the sensations by both groups was a "twisting" or "drawing," "burning" or "tickling" or "cramping" sensation in the missing extremities. We therefore concluded that phantom pain occurred in individuals who were having phantom sensations but who as a result of psychopathology interpreted these sensations as being painful. Schmidt in 1908 noticed the occurrence of pain in an unstable person and commented, "Certain types of pain might have a physical origin." He recommended treatment of pain of this type by diverting the patient's attention to suitable occupations. Wolff, Gasser, and Hinsey have also remarked "Attitude and suggestion may modify both the pain . . . and the manner of reaction. Attitude engendered by situations and experience may be accompanied by alterations in the pain threshold and in the

manner of reaction to pain." Recently, we have seen a white female in her early sixties who had a rather typical thalamic syndrome involving the left side of her face and arm. The pain was paroxysmal in type and of the usual burning character. This pain had been treated by suggestion and it is interesting to note that occasional suggestion in the form of sterile hypos, or very small doses of intravenous amytal with suggestion would relieve the attacks. At other times attacks of similar intensity were not in any way relieved or shortened by these medications. When first seen this patient was suffering from a rather severe depressive reaction to her illness and she had been given a course of electric shock therapy by one of our colleagues with no permanent influence on the painful sensation. It was interesting to note however that during the series of shock treatments the patient became somewhat confused and the painful sensations either disappeared or the patient quit complaining of them, but as the confusion disappeared the complaint of pain recurred. In view of the fact that she improved temporarily with E.S.T. and because Freeman and Watt have reported improvement in patients suffering from intractable pain when treated with lobotomy, this patient was subjected to a prefrontal lobotomy. Following the operation, the patient did not spontaneously complain of pain, but if asked, she would state that pain did occur "but not a bad pain." The reaction to the pain was not one of fear, apprehension or great suffering, but was an objective description of her sensation. It's interesting to note that during her convalescence she developed a fecal impaction and her reaction to the excavation of this impaction by one of the internes was about like that of any other patient. She complained long and bitterly with the pain and the indignity of the procedure. This patient is getting along well at home without any sedatives and without any spontaneous complaints of severe pain but when asked will state she has occasional attacks of pain of mild degree. At approximately the same time the above mentioned patient entered our service, another patient, a male, also in his sixties entered the hospital complaining of a painful amputation stump. It is interesting that in this particular case the patient had had a series of accidents all while working for himself and in none of them was any insurance of compensation involved. The one resulting in the amputation was the result of an injury sustained while operating his own small saw mill.

This patient was an unstable individual of low average intelligence, little education, and borderline economic adjustment. This patient was treated with psychotherapy with equally satisfactory results so far as relief of pain was concerned. Pisetsky reports the treatment of a man with a painful amputation with electric shock with improvement in the depression and disappearance of the phantom pain. Lidz and Payne reported a case of causalgia in an unstable person who was treated by psychotherapy with recovery. Horrax reports a series of patients who had cortical excisions for pain and while there was some relief of pain in his series he concludes that prefrontal lobotomy would be a preferable operation for relief of pain. On the other hand, Spiegel and Milousky studied 275 peripheral nerve injuries and report that the pain was not commensurate with the degree or extent of injury. They felt that the personality disorder or hysteria present was the result rather than the cause of the difficulty and they state that the treatment of choice is either block or removal of the sympathetic pathways.

Chapman, who has studied experimental pain by an excellent quantitative method reports extensively on the measurement of pain sensitivity in normal and psychoneurotic persons. He found that the variation in the threshold of pain varied tremendously between individual persons but was quite consistent for the same person. He found that in normal individuals the average intensity spread between the point of pain perception and the point of pain reaction was about 20 per cent. He reports that these both decreased with increasing age. He states that the Negroes as a group had a lower pain perception value than the northern European individual, and persons of Italian and Russian-Jewish extraction had perception levels approximating that of the Negro. He found that the pain reaction threshold was much lower for the psychoneurotic group and some showed reaction to pain before perception was obvious. Within the subgroup there was tendency for patients with anxiety neurosis and hysteria to wince with smaller stimuli than the patients suffering from hypochondriasis. In another paper Chapman and Jones studied the role of possibly modifying factors on the pain threshold. They gave epinephrine and acetylcholine to some patients, induced several acidosis and alkalosis in them, and they also studied patients with severe mental and physical fatigue, nervous tension and fasting. They found that only

mental fatigue and nervous tension produced any significant change in cutaneous sensitivity to pain. Haman reports that dysmenorrhagic women have a much lower pain threshold than either control series of women with no dysmenorrhea or a control series of men. He found no significant differences in the pain threshold between the two control groups. (Pain threshold was determined by the recording pin prick method, that is, a quantitative pin prick.)

The many factors which influence pain sensation have in common the property of altering the function of the autonomic nervous system. There are several interesting observations along these lines. For example, Torda and Wolff report that patients with prolonged attacks of migraine begin to show rigidity in the arteries of the scalp. They state "An initial local vasoconstriction of cerebral arteries produces visual and other sensory preheadache phenomenon. As these phenomenon recede vasodilator manifestations of headache appear. Vasodilation of certain arteries, usually branches of external carotid, give rise to throbbing pain which is usually reduced by pressure on common carotid or by vasoconstriction with ergotamine. Vasodilation of several hours leads to thickening and edema of vessel walls. The vessels become tender and pain changes to a steady ache." Ivy, Goetzel, Harris and Burrill report that epinephrine injected into dog or man produce analgesic effects which last from 60 to 90 minutes and they felt that reaction was a specific one on the central nervous system. Guillaume, Bertrand, and Mazars reported some abnormalities in the E.E.G. of a patient with a postamputation pain. These abnormalities in the E.E.G. were on the side of the amputation and they thought they were secondary to cortical disturbance produced by the uncrossed sympathetics. They treated this patient with cordotomy with relief of pain and the E.E.G. abnormalities disappeared. Unfortunately, the article doesn't explain how disturbances in the sympathetics would produce the changes in the E.E.G. but one wonders if this might imply some type of vascular disturbance.

One thus finds that pain as a subjective sensation or psychologic phenomenon is almost invariably encountered in response to things that destroy the general contiguity of the body such as severe cuts, bruises and abrasions, unless the injuries are incurred in situations of strong emotional coloring or in states of impaired consciousness, anes-

thetia, or hypnosis. Under other circumstances the psychologic phenomena or subjective experiences of pain occurs when the person perceives stimuli which previous experience tells him are unpleasant and harmful. If we then consider that these stimuli are perceived as painful or pleasurable in terms of the circumstances under which they occur and in terms of the previous experience or conditioning in which the experience was encountered, some of our contradictions become more understandable. Thus we can understand the behavior of animals or children who react in a pleasurable way to electric shocks that have been associated with feeding, and we understand how the small boy who is indifferent to the many hard knocks encountered while playing football will howl in pain if less severe blows are administered by the parent who catches him misbehaving. This concept also gives us an explanation for functional pain. During our waking state we have the capacity to be aware of ourselves in relation to space. This orientation is possible because stimuli received over visual, vestibular, proprioceptive and cutaneous pathways are ever intruding upon our consciousness. If our attention is drawn to some body segment and if the circumstances are such as to make the conditioning that of an unpleasant sensation, the ordinary stimuli from this segment will have an altered meaning for the patient and pain may result. The compensation case who bumps his bottom or back and responds with pain is an excellent example of such a situation. The pain of phantom limb that is considered psychologic because the limb isn't there also has an explanation on this basis. The fact that the relief of these pains may be obtained by lobotomy is further evidence along this line. Gastrointestinal pain which also defies description by the usual anatomical pattern of receptors, afferent tracts, central areas and perception of sensations also becomes understandable. Explanation of visceral pain is always embarrassing because we don't learn the theories of pain until we are grown and we find to our consternation that we forgot to grow pain fibers in most of our viscera and that all the bellyaches we had as a child were anatomically impossible. We then find ourselves faced with admitting we have been having visceral hallucinations and are therefore crazy or we must find a substitute explanation. In looking about we fix our attention on the nearest available pain fibre and speak of referred pain, omental twist and other verbal curtains to cover our

ignorance. In terms of our present thesis one could explain visceral pain as follows. We are receiving certain sensations from our viscera at all times. These are usually of low intensity and most of them stop in the hypothalamus or "outer office" area. Under stress we become aware of these sensations. If the circumstances are unpleasant or fear producing these stimuli may be interpreted as painful. The pain may be the result of unpleasant environmental factors which has conditioned one to some type of visceral sensation or it may be an increase in autonomic-stimulus from an insult to the viscera itself. At any rate, the stimuli from the viscus, either normal or aggravated, are perceived as painful. You may object that awareness of function in all visceral organs is incomplete and is absent in some of them such as the spleen and the adrenal. This is true but it is also true that we rarely see patients complaining of pain when the spleen and adrenal are diseased and we never have psychoneurotics complain of pain in these organs. They commonly pick on the musculoskeletal system, the genital organs, the G.I. tract, the heart and the respiratory system, and these are the symptoms from which we receive most of our inner promptings and thus from which we have stimuli which we could under the proper circumstances interpret as pain. It is also of interest that these organs are all abundantly supplied by and largely under the control of the autonomic nervous system and thus are subject to the autonomic storms which are invariably present in psychoneurotics who are displaying anxiety or tension phenomena of any degree. Perhaps the pure psychologist would object that no stimulus of any physical sort is necessary and that pains may be created mentally in terms of past experience. If this be true, then we must have one system of pain to explain our neurotic suffering and another to explain the pains of injury because in spite of our objections and exceptions most people still jump in response to a hot foot. If we assume a purely "mental pain" we might add to Head's grouping and we would then have protopathic, epicritic and "hipocritic" pain. The pure physiologist may object that neurotic or mental pain is pure imagination and doesn't exist. If this is so, then these patients are either liars or are having somatic hallucinations. Before our physiologist arrives at this conclusion and accepts our "hipocritic" classification, let him recollect his own visceral sensations just before his wedding, or at some other time of

great stress and fear of impending disaster.

From the above accumulation of material I think it is easy to see why I consider pain a subjective experience, encountered under varying circumstances. The simplest and easiest to understand is some stimulus which rudely and seriously interrupts the body contiguity. Even here, however, other stimuli entering upon the sphere of consciousness such as the excitement of battle or the anticipation of food interferes with and may obliterate the expected painful sensation. In other persons hypersensitivity to certain functions in various body areas, usually accompanied by autonomic imbalance in those same areas, may result in sensations of pain. The person's interpretation of stimuli will depend entirely upon his concept of a previous experience with the stimuli and the circumstances under which it is encountered. We have cited examples and illustrations in which this type of reaction is true. It is the only concept that I have been able to devise which makes pain logical. Those of us working largely with nervous patients know that in most of them the pain is genuine, they are really suffering, and in such things as headaches and neurotic origin, the muscle tension in the neck and the variations in scalp vessel size are sometimes visible to the eye. Patients with low back pain of neurotic origin often have increased muscle tension and those with G.I. disturbance of neurotic origin, usually have gut spasm demonstrable by x-ray. These patients are having pain. The pain is real and genuine. It is merely that the relief of the pain, that is, the removal of the cause must be directed at the psychologic disturbance, which may be the removal of a mother-in-law or a desensitization to some traumatic experience rather than of some offending viscus by surgical procedures. It is my belief that as our knowledge of pain increases there will be little distinction between pain due to functional and organic causes. At this time the term "imaginary pain" and similar appellations should not be used except to describe certain unscrupulous individuals who are lying about their suffering in an effort to gain compensation. The neurotic patient should be considered as suffering in exactly the same manner as the patient with more easily demonstrable, that is, more easily visible pathology.

It's merely that a different approach to the cause must be utilized.

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Organization of Tumor Clinics in Oklahoma*

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WEWOKA, OKLAHOMA

According to the American College of Surgeons, Oklahoma was one of the remaining six states of the nation without a tumor clinic, or cancer clinic, meeting the minimum standards as of December 1, 1947. In contrast to this lack of cancer clinics in Oklahoma, the state of New Hampshire was listed as having one approved cancer clinic for every 50,000 people in that state. There, no resident had to travel more than 50 miles to a recognized diagnostic or treatment center. Even though Oklahoma may appear somewhat retarded, so far as the organization of cancer clinics is concerned, let us not lose sight of the fact that creditable work with cancer has been carried on in many of our larger hospitals and by individual doctors as well.

Someone has said that a sound cancer program consists of early diagnosis, and more early diagnosis. This appears sound so far as it goes, but perhaps it should be pointed out that all efforts toward early diagnosis are in vain if the necessary facilities for treatment are not provided. It is not necessary to remind you that cancer is one of the major medical problems today. Because of the complex nature of the disease, practically every field of medicine has its own cancer problem to solve. Therefore, in order to assure patients of a thorough examination, an accurate diagnosis, group opinion, and the best in therapy, a team of doctors consisting of the general practitioner or internist, the pathologist, the radiologist, the surgeon, and other specialists is necessary. Such a team of doctors, coordinating their knowledge and efforts, will be found in an approved cancer clinic.

The American College of Surgeons lists the advantages of a cancer clinic as follows:

1. Concentration of interest in the study of cancer by a selected group.
2. Pooling of the knowledge of those versed in different phases of cancer work.

3. The educational opportunity that is offered to individual members of the staffs of cancer clinics, to visiting physicians, and to medical students in training.
4. Standardization of records. Statistical studies.
5. Concentration of material for clinical research.
6. Greater ease in securing financial support and cooperation of lay individuals and organizations, in furnishing equipment, clerical and nursing aids, non-professional technical aids, and transportation of patients.

Even today, Oklahoma has no tumor clinics with formal approval. Two tumor clinics have been organized in conformity with minimal standards as recommended by the American College of Surgeons. Both of these tumor clinics have been organized within the past six months. The first to be established is located in the University Hospital, and represents the joint efforts of the Medical School and the Hospital, the Oklahoma County Medical Society, the Oklahoma Branch of the American Cancer Society, and the Cancer Division of the Oklahoma State Department of Health.

The Hospital and Medical Society provided the space or housing and the medical staff. The Cancer Society made a flat grant for supplies and cost of operation, as well as some financial assistance for equipment, transportation, and incidental expenses for patients attending the clinic. The State Department of Health paid for most of the scientific equipment, including diagnostic and therapeutic x-ray facilities, office equipment, the salary of the part-time director of the clinic, the salary of the medical secretary, and an additional sum for hospitalization for diagnosis where indicated.

This clinic is for the medically indigent only. An application for admission is made in the usual way, except those needing hospitalization for diagnosis, in which case an additional application is filed with the State

*Presented before the Section on Medicine at the Annual Meeting of the Oklahoma State Medical Association, May 19, 1948.

Department of Health for authorization of payment. All cases, or suspected cases, are first routed through the Outpatient General Clinic for work-up, and are then referred to whatever special department is indicated. The tumor conference, in which all staff members participate, is held each Thursday morning, at which time the director of the clinic selects certain cases for a discussion of diagnosis and/or treatment.

Almost immediately after the opening of the tumor clinic in Oklahoma City a second clinic was organized in Tulsa. Tulsa was fortunate in having already an excellent two-story clinic building adjacent to the St. John's Hospital, which was made available through the generosity of a civic minded former citizen. The organization of the clinic itself was accomplished by the cooperation of the Tulsa County Medical Society, Oklahoma Cancer Society, and Cancer Division of the State Department of Health.

The Medical Society provided the medical staff and director. The Cancer Society made a flat grant for maintenance and incidental expenses for needy patients attending the clinic. The State Department of Health bought scientific and office equipment, 150 milligrams of radium, pays part of the salary of a medical secretary, and in addition provides funds for hospitalization for the diagnosis of indigent patients when necessary.

The Tulsa Clinic is not identical in organization or operation to the Oklahoma City Clinic. All patients referred by medical doctors are eligible for diagnosis regardless of the ability to pay. Those financially able are

charged a fee which helps defray the cost of operating the clinic. The entire team of specialists work on the same day, making it possible for the clinic to meet once a week only; namely, Tuesday. The so-called tumor conference in which the diagnosis and proposed treatment for each individual patient is discussed by all members of the staff, is likewise held on Tuesday. It would appear that the Tulsa Clinic is built on sound principles of organization and operation, and should develop into an outstanding diagnostic and treatment center.

The possibility of organizing additional tumor clinics, similar to the ones described, is limited by a marked shortage of specialists in lesser centers of population. The shortage is most acute among pathologists and roentgenologists. However, it is hoped that at least some of our larger cities will follow the lead of Oklahoma City and Tulsa in establishing additional clinics. Perhaps some of the staff vacancies can be filled by visiting consultants. Where it is impossible to provide adequate treatment facilities, there still may remain the possibility of establishing a diagnostic clinic. It would appear logical that even small towns, almost or completely void of medical specialists, might improve their present service to the cancer patient by pooling their knowledge and resources in a cancer screening, if not a diagnostic clinic. Visiting consultants to such screening clinics would not only improve the service directly, but would accomplish lasting benefits by providing much needed on-the-job postgraduate training for the general practitioner.

MEET OUR CONTRIBUTORS

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Jack R. Ewalt, M.D., F.A.P.A., Galveston, Texas, was one of the guest speakers at the Annual Meeting and his article "Pain from the Psychiatrist's Point of View" is in the October Journal. Dr. Ewalt was graduated from the University of Colorado in 1933 and specializes in neuropsychiatry. He is a member of the following psychiatric societies: American, Central and Galveston. He was previously with the University of Colorado at Denver and is a member of the Mental Hygiene Committee and the council of the American

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Carl L. Brundage, M.D., M.D., B.S.MSc., Oklahoma City, wrote the scientific article on "Warts and Their Treatment" in the Journal. He was graduated from the University of Oklahoma and limits his practice to dermatology and syphilology. He is a member of the American Academy of Dermatology and Syphilology.

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WARTS AND THEIR TREATMENT*

CARL L. BRUNDAGE, M.D.

OKLAHOMA CITY, OKLAHOMA

Warts are benign epithelial new growths of the skin formed by hypertrophy of the papillae.

The contagiousness of warts was first proven by Jadassohn in 1895 by accidental and experimental transmission. In 1919 Wile and Kingery produced lesions of *verruca vulgaris* which were clinically and histologically typical by injecting intracutaneously a sterile filtrate of wart material.

It has been proven that the warts of horses, cows, dogs and rabbits are caused by a filterable virus. Warts have been transferred from man to other animals but it is more difficult and the period of incubation is longer. The incubation period of warts varies from one to 12 months, the average being two or three months. Because the common wart is due to infection, one wart is frequently followed by the development of others, often around the site of the original wart.

Five clinical types of warts are recognized:

1. The common wart (*verruca vulgaris*)
2. The plantar wart (*verruca plantaris*)
3. The flat juvenile wart (*verruca plana juvenilis*)
4. The filiform wart — with thread-like pedunculated cutaneous tabs.
5. The so-called venereal wart (*verruca acuminata*)

The diagnosis of a common wart is usually not a difficult matter. At first the wart is small, has the color of the surrounding skin, is only slightly elevated and has a smooth surface. After a few months, the surface becomes roughened, the wart rises from the surrounding area and may take on a yellow, brown, gray, or almost black color. If the central portion of the wart is exposed by close paring, multiple small black points will be seen. These are the result of hypertrophied papillae containing greatly distended blood spaces largely filled with hemogenous hyalin. The rupture of these vessels permits small masses of coagulated blood to escape into the epidermis, where they are carried up and become visible as the small black points which the layman commonly

calls "seeds." Although warts may occur on any part of the skin, they are most common on the hands, feet, knees, scalp, face and neck — those areas where cuts and scratches are most likely to occur.

Warts do not lead to cancer, however sometimes cancer of the skin is mistaken for a wart, so that valuable time may be lost because of this misdiagnosis. An epithelioma of the skin usually has a more infiltrative base than a common wart. On the tongue or lip the infiltrative base of an epithelioma may not be perceptible clinically and it may be necessary to have a microscopic examination of the lesion to make a diagnosis.

Tuberculosis verrucosa cutis lesions may resemble warts, however they are usually larger and are surrounded by an erythematous base.

Plantar warts, such as we see on the heel and ball of the foot, are essentially the same as *verruca vulgaris*. They are not elevated above the skin level because of the pressure of body weight. Here, they push the underlying skin inward, causing pressure on nerves and often much pain. Halberg of the Finsen Institution, Copenhagen reports that females exceed males by 89 per cent in his series of plantar warts. Sixty-seven per cent of all patients were of school age (six to 15 years). More warts occurred on the anterior portion of the foot in women than in men. Halberg attributes this preponderance of plantar warts in women to the fact that they wear high heels, which causes three and one-half times more pressure on the anterior part of the foot.

Verruca plana or flat warts occur as pin-head-sized or slightly larger, smooth, slightly raised, flat lesions. These warts are generally multiple and numerous, being grouped on the face, neck, dorsa of the hands, wrists and knees. They tend to spread within scratch-marks and thus form linear, slightly raised, papular lesions. Their color is usually that of normal skin, or light brown. Although children are the favorite subjects, these warts occur also in adults. *Verruca plana*, if hyperpigmented, may be confused with freckles. If the flat warts are excoriated, it

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association, May 19, 1948

may require palliative treatment and time to differentiate verrucous nevi, lichen planus and papular eczema.

Verruca filiformis is a special variety of verruca vulgaris in which the lesions are single, soft, thin, thread-like projections. They are seen especially about the eyelids, on the scalp in association with seborrhea, and occasionally about the mouth and chin.

Verruca acuminata, grossly, bear at times a strong resemblance to a raspberry or a cauliflower. They are soft to the touch and are of a red, cyanotic hue. They begin as small, discrete, pointed papillae but later become confluent on form growths of considerable size, especially during pregnancy. Verruca acuminata have been described in many locations, usually on or near the genitalia, and have been given the misnomer "venereal warts." I have observed them on the penis, the labia, the fourchette, lining the vagina, at the urethral meatus, around the anus, on the perineum and on the scrotum. The most common site of these lesions is between the labial folds, where the vaginal secretion collects and is less likely to be removed by cleansing; they are also found on the perineum, within the vagina, on the cervix, on the prepuce, and may also occur just at the edge of the anus or on the mucous membrane above the sphincter, usually in the first inch of the canal.

Verruca acuminata must be differentiated from malignant growths and from lesions due to syphilis. The lesions of syphilis are usually flat and broad whereas those due to gonorrhea or to non-specific causes are pedunculated or sessile. Carcinoma, with which the verrucae may be confused, can be excluded by microscopic examination.

Although warts may persist for 30 years, they usually disappear in about three years without treatment after immunity has been established.

The successful treatment of verruca vulgaris at times becomes a complicated problem, particularly so, if there are multiple lesions in a young or uncooperative patient. The technique should be as painless as possible, and should not disturb the patient in following his usual occupation. If there are a few common warts on the hands, body or mucous membranes, the most practical method is cauterization or electrodesiccation. It is usually necessary to infiltrate the base of the lesion with a two per cent solution of novocain. The surface of the lesion is charred but not too deeply. When the horny

substance is removed grossly, one can see a moist, whitish, mucoid material which marks the region of the lower part of the basal cell layer and papillae. This zone is very vascular and fragile. When the lesion is removed surgically, this vascular area must be removed completely or the wart will return. After the base is lightly cauterized the application of three per cent solution of gentian violet or three per cent ammoniated mercury ointment will prevent secondary infection. If the lesion is over a joint, splinting will facilitate healing. The patient should be informed that it will be 14 to 21 days before the lesions are healed and that a slight scar may result.

Besides mechanical removal of verruca vulgaris other therapeutic methods may be listed as follows: (1) chemical; (2) radiation, and (3) psychic.

If there are numerous warts in a young or uncooperative patient, it is advisable to treat the mother wart either by cauterization or one ultra intensive dose of x-ray closely chielded to the lesion with lead foil, prescribe protiodide of mercury orally, Vlemminckx's solution locally, and assure the patient that the other warts will disappear in a specified time. It is a well known fact that the successful treatment of the mother wart will frequently cause the other warts to disappear.

For superficial x-ray therapy I use the following factors: 100 Kv., 5 Ma., 8 inch distance, unfiltered giving one treatment of 1200 r. At the end of two weeks there is a mild reaction and within four to eight weeks the wart is completely cleared in 80 to 90 per cent of the cases.

If one prefers to use radium a full strength, flat, glazed element applicator, screened with 0.1 mm. aluminum may be placed in contact with the lesion for 15 to 30 minutes or longer, depending upon the thickness of the horny layer. Screened with one mm. of brass and one mm. aluminum and in contact with the lesion, the exposure will be one or two hours or even longer.

It is a well recognized fact that warts may disappear without treatment. The average duration of untreated warts is three years. Curious things happen in the disappearance of untreated warts: They may remain unchanged for many years but flatten and disappear within a few days, leaving no scar. Occasionally, some of the warts will disappear and the rest will remain. And sometimes the treatment of a few warts is follow-

ed by the disappearance of others which have had no treatment. There is no satisfactory explanation for the disappearance of untreated warts.

Folklore regarding the treatment of warts goes back hundreds of years and some of the methods advised as entertaining. A long list of local applications is offered, for example: tobacco juice, axle grease, morning dew, salt pork rind, etc. Psychotherapy has been used with success by some workers. I have tried this method with multiple warts in very young children. The results have been variable. Whether the response in some cases was due to spontaneous clearance or psychotherapy I cannot say. Memmesheimer and Eisenlohr followed 140 patients with warts for six months. Seventy were treated by psychotherapy, and 70 were untreated, as controls. At the end of six months it was found that 17 treated patients and 20 untreated patients were cured.

Warts are precarious in their behavior. The healing of virus disease by suggestive therapy alone is difficult to understand. However the validity of psychic therapy of warts, first demonstrated by Bloch, has been confirmed by Sulzberger and several other investigators. Bloch claimed 88 per cent of flat warts and 44 per cent of common warts completely disappeared with suggestive therapy alone. Suggestive therapy is of questionable value but I believe it should be used in conjunction with the accepted methods of therapy for the various types.

Even vaccine therapy has found its supporters in the field of wart therapy. Biberstein reported cures of between 50 and 70 per cent of verruca vulgaris and 85 to 90 per cent of verruca plana by vaccine therapy. He used autolysates from human and from cattle warts.

The plantar wart has been treated with countless remedies by those of our own profession, as well as by chiropodists. Acids of all sorts, cutting, burning, and even black magic and suggestion have all been tried, and some still have their devotees. Surgical excision, surgical diathermy, curettage, electrolysis, freezing with solid carbon dioxide and application of salicylic acid have been used. The injection of bismuth compounds, either intramuscularly or into the base of the wart has been disappointing in the few cases in which I have tried it. Probably the method of choice is the use of x-ray. It is painless, eliminates the chances of secondary infection and does not interfere with the pa-

tient's daily routine. X-ray therapy is safe provided the treatment is administered with due respect for the tolerance dose. About 80 to 90 per cent of the cases of plantar warts will respond to one ultraintensive dose of x-ray. It is a method always welcomed by children, because there is no pain, no attendant fear of needles and knives and no interference with play. In children I believe it is always the method of choice, especially now with the use of shock-proof apparatus. It is essential that the keratotic surface of the wart is shaved off and the lesion is closely shielded with lead foil. If another treatment is given the interval between treatments should be at least two months.

In the case of plantar warts which have not responded to one or two intensive doses of x-ray, or the cases which have been treated elsewhere with x-ray or radium, I have used 75 per cent salicylic acid paste with considerable success. The surface of the wart is shaved off, the lesion is shielded with moleskin adhesive, the salicylic acid paste applied and allowed to remain for a period of four or five days, until the wart has become soft, then curet and apply 25 per cent solution of silver nitrate. This procedure is repeated for several weeks if signs of the wart persist. The method is tedious in that it requires a long time, but it has its advantages. It is not painful and does not prevent the patient from pursuing his usual occupation.

Verruca plana or flat warts are more radio resistant than common warts but are much more receptive to suggestive therapy and to chemical therapy. Protiodide of mercury orally and Vleminckx's solution locally are old popular remedies of doubtful value. Twenty years ago some of our best teachers in dermatology recommended protiodide of mercury in all cases with extensive warts and stated it was almost a specific for flat warts. If mercury is not contraindicated, I prescribe protiodide of mercury grs. $\frac{1}{8}$ to $\frac{1}{4}$ t.i.d. and increase the dose if necessary to produce a diarrhea. Vleminckx's solution locally once a day, a fractional dose of x-ray or a suberythema dose of ultraviolet rays is given for its psychological effect, and try to assure the patient that the warts will disappear within a specified time.

The filiform wart with thread-like, pedunculated cutaneous tabs is best treated by light cauterization and curettage.

Verruca acuminata, or so-called venereal warts, are radio resistant and were resistant

to all other methods of therapy until Kaplan in 1942 introduced the topical application of 25 per cent podophyllin in mineral oil. Podophyllin is a powder which varies in color from light brown to greenish yellow, and turns darker when subjected to heat or light. It is an irritant and active purgative and is the basis of several proprietary "liver pills." Apparently the same penetrating-irritating power of podophyllin for the intestinal mucous membrane causing catharsis, penetrates and shrinks the polypoid vegetations growing on the mucous membranes of the genital region. It seems to be completely ineffective on the hard (vulgar) warts.

The podophyllin, 25 per cent in mineral oil, is applied with a cotton swab to the surface of the lesion. Kaplan advised the removal of this preparation about eight hours later with soap and water to prevent a primary dermatitis. The procedure is painless and there is no immediate reaction. It is often impossible to keep the podophyllin confined to the verruca, but in most instances this does not alter the therapeutic effect of the drug. Within a few hours the growths become blanched, and 24 to 48 hours later they appear necrotic. The warts being to slough on the second or third day and promptly disappear. No ulceration or scarring is left at the base. The adjoining normal tissue usually is unaffected even though it has been exposed to the same medication.

Originally it was assumed that the irritating power of the drug produced a spasm of the small vessels, which in turn caused ischemia, necrosis and sloughing. Recent exhaustive studies by Sullivan and King suggest the main effect of the resin of podophyllin is directly on the epithelial cells. They

studied numerous microscopic sections of treated warts and found two types of action are manifest. One is of direct degenerative character while the other is the production of bizarre cell forms interpreted as distorted mitotic fingers.

School children suffering from warts should take care that others are not infected. They should be segregated, as far as it is feasible. Their books, pencils and personal belongings should not be interchanged. In dormitories, they should have their own bath rooms, and should not use the school swimming pools or gymnasium. Care should be taken in the use of towels, bath mats and shoes.

The most common mistake in the treatment of warts is over treatment. A large majority of the various types of warts will respond to one of the accepted methods of therapy, i.e., surgery, chemical and radiation.

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MOORMAN LEADS TEAM TO STUDY NAVAJOS

Lewis J. Moorman, M.D., Oklahoma City, editor of the Journal and secretary-treasurer of the Oklahoma State Medical Association was leader of a team of outstanding specialists named to study health conditions among the Navajo Indians during the last two weeks of September.

Dr. Moorman headed the five man group which included specialists in the fields of public health, preventive medicine, orthopedics, dermatology, general practice and hospital administration. Dr. Moorman was selected to lead the group by the U. S. Department of the Interior.

COMMENTS ON THE TREATMENT OF MENIERE'S DISEASE (Endolymphatic Hydrops)*

CLINTON GALLAHER, M.D.

SHAWNEE, OKLAHOMA

In the year 1861 there appeared in the Medical Gazette of Paris an article by Meniere which called attention to the now well known triad of symptoms, vertigo, deafness and tinnitus. From that date these three symptoms associated have been known as Meniere's Disease, or perhaps more properly as Meniere's Syndrome. Unfortunately, a large variety of otological conditions have found shelter under that name and confusion in its proper definition is quite understandable. Meniere himself contributed somewhat to this confusion in his selection of the case report which was used as an example of the syndrome. He reported the case of a young woman who sustained this triad of symptoms and died. From the course of her illness it appears that she probably died as a result of an infection, or from a hemorrhage of leukemic origin. Such a situation bears no definite relation to the pathology which is now commonly associated with the syndrome.¹

The essential pathology² is generally considered to be what is called a hydrops of the endolymph of the labyrinth, the essential mechanism is an obstructive distension of the endolymphatic system, an edema which is directly related to changes in the permeability of the perisaccular connective tissue. As a rule it is unilateral. Most observers are inclined to assume a delay in the disposal of surplus endolymph through absorption into the blood stream. It is thus possible that a variety of factors may be responsible for an increased endolymphatic pressure, sufficient to interfere with normal vestibular activity, and precipitate an attack.

A most significant clinical factor is the sharp contrast between the prostrating attacks and the complete absence of symptoms

of vestibular disturbance during the intervals between attacks. Those who have made any considerable study of glaucoma may be impressed with certain apparent similarities of the two conditions, notably the accent which is generally given to the importance of the permeability of connective tissue structures and electrolytes which have to do with the control of tissue fluid pressure.

Diagnosis is rarely in doubt. The attack is dramatic, prostrating and fairly abrupt in onset. The patient is in great need of reassurance. There is a perceptive deafness almost invariably in one ear. There are no demonstrable signs of any disturbance of the central nervous system. Differential diagnosis must include attention to the specific causes of vertigo, an incomplete list of which is here submitted.³

1. Ocular

- 1). Abnormalities in the dioptric apparatus (dizziness)
- 2). Paralysis of extra-ocular muscles (vertigo)
- 3). Optokinetic nystagmus (vertigo)
- 4). Looking down from heights (dizziness)

2. Aural

- 1). Obstruction of eustachian tubes (vertigo)
- 2). Otitis media (vertigo)
- 3). Labyrinthitis (serous or suppurative) (vertigo)
- 4). Erosion of the labyrinth by cholesteatoma (vertigo)
- 5). Embolus of auditory artery or hemorrhage into labyrinth (vertigo)
- 6). Blood dyscrasias with invasion of labyrinth (vertigo)

3. Neurologic

- 1). Sympathetic spasm of auditory artery (vertigo)
- 2). Arteriosclerosis of central nervous system (dizziness)

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association, May 18, 1948.

- 3). Tumors of the fourth ventricle (vertigo)
- 4). Thrombosis of posterior inferior cerebellar artery (vertigo)
- 5). Carotid sinus syndrome (dizziness)
- 6). Syphilis or poliomyelitis affecting the brain stem (vertigo)
- 7). Multiple sclerosis (vertigo)
- 8). Syringobulbia (vertigo)
- 9). Tumors and abscesses of cerebellum (dizziness)
4. Psychogenic (dizziness)

We are inclined to agree with those who feel that medical treatment may be predicated upon the assumption that a change of osmotic pressure precipitates a change of endolymphatic pressure. It is therefore reasonable to assume that these attacks may be related to any metabolic disturbances which are characterized by a change in the pH of the body fluids. This idea in turn leads to a consideration of the metabolic influence of sodium and calcium. The basic etiology cannot be dismissed without references to the possible influence of the vitamins, and the allergies.

It appears that most methods of medical treatment which have been successful have been based on the concept that Menier's Syndrome is some form of allergy. Efforts have been directed toward controlling the fluid balance, controlling the electrolytic metabolism by withholding or administering certain electrolytes, and by stimulation of the autonomic nervous system.⁴

One may be inclined to simply list the various suggestions, not necessarily in order of importance, for it seems a matter of opinion.

Frustenburg and Cawthorne report excellent results with a large series of cases treated with the salt free dietary routine.

LOW-SALT AND RESTRICTED FLUID DIET

1. Neither salt nor soda is to be used in the cooking or at the table.

2. The following foods **MUST** be avoided:

bacon	tinned fish
ham	bloaters
corned beef	kippers
salt beef	smoked fish
sausage meat	shell fish
meat extracts	baked beans
gravy	breakfast cereals
tinned soups	bottled olives
marmite	meat and fish pastes

3. Cheese and salt butter must be taken sparingly if they cannot be avoided.

4. Bread should be baked free of salt when practicable.

5. Not more than two and one-half pints of fluid should be taken in any 24 hours.

The above diet is supplemented by the use of ammonium chloride on the assumption that it will assist in correction of sodium ion concentration in body tissues.

Mygind and Dederling recommend the restriction of fluid intake to 700 cc. daily and report improvement in 151 of 157 cases.

Sheldon and Horton used histamine diphosphate parenterally. In 1934 Campbell reported favorable results with this method.

Atkinson⁵ elaborates on the method and divides his cases into the vasodilator (allergic) and vasoconstrictor groups, administers histamine or nicotinic acid, depending upon the reaction of the histamine sensitivity test.⁶

Haughton⁷ employed a routine somewhat as follows. In the acute attack the patient is placed in a recumbent position in bed in a semi-dark room and is assured that the attack is self limited. Excitement is controlled with scopolamine 1/600 and hyoscyamine 1/150, orally. Fluid intake is restricted to 800 cc. daily. Following the attack a histamine skin test is done. If it is positive, histamine desensitization is started. If it is negative, nicotinic acid is given intramuscularly. The salt free program is also employed in some cases.

Lindsey⁸ used the sodium-free diet of Frustenburg accompanied by ammonium chloride, six to nine gram daily for alternate three-day periods. Inflation of the eustachian tube does not seem to be of value. The vasodilator effect of histamine is secured by the intravenous injection according to Horton's method, 2.75 mgms. of histamine diacid phosphate in 250 cc. normal saline over a period of 90 minutes or more. The theory of desensitization to histamine seems to have been refuted. The use of antihistamine has not yet been established as an effective treatment. About 10 per cent of the cases will ultimately require surgical treatment.⁹

Surgical Treatment. McKenzie of Toronto did an intracranial section of the vestibular portion of the eighth nerve. The procedure is not free from complications and most neurosurgeons now reserve it for carefully selected cases.

Other procedures have been performed on the labyrinth. They include Portmann's operation which is the surgical production of an opening into the endolymphatic sac.

The rational of this operation has not been well established. Injection of alcohol into the labyrinth will prevent the attacks of vertigo but also destroys hearing and in some cases has produced facial paralysis. In the case of the unilateral involvement a labyrinthotomy with destruction of the endolymphatic labyrinth, a safe way of preventing further vertigo. The hearing is almost always destroyed. This procedure is obviously unsuited to cases where there is bilateral involvement.

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CLINICAL PATHOLOGIC CONFERENCE

The University of Oklahoma School of Medicine

Presented by the Departments of Pathology and Surgery

BELA HALPERT, M.D. AND CHARLES M. O'LEARY, M.D.

OKLAHOMA CITY, OKLAHOMA

DR. HALPERT: Interrelationships between disease of the biliary tract and of the pancreas, and between the pancreas and the vascular system, if any, are not well understood. When all three of these are involved, bizarre clinical manifestations may occur which are hard to resolve, even by the most skilled clinician. The patient today presents such a condition. We are indeed happy to have Dr. O'Leary with us to analyze and discuss the clinical aspects of this case.

PROTOCOL

Patient: L. L. R., 44 year old white female. Admitted September 27, 1947; died October 21, 1947.

Chief Complaint: Pain and distention of abdomen and weakness.

Present Illness: The patient was apparently in fair health until September 2, 1947, when she had a chill and fever at about 9:00 P. M. At 11:30 P. M. she awakened with intense pain in the abdomen radiating to the chest and both infrascapular regions. The pain was so severe that she was unable to stay in bed. It continued unabated until the time of admission. She vomited every-

thing taken by mouth and did not have any bowel movements during the next six days. She noticed that her abdomen was distended and slowly increasing in size until her admission to the University Hospitals on September 27, 1947.

Past History: At the age of three she had poliomyelitis leaving a deformity of the right leg and hip. In 1941, she had substernal pain radiating to the left arm, diagnosed by her physician as a coronary occlusion. She apparently recovered after three weeks in bed. For several years she had had mild epigastric pain and belching. In 1944, she developed jaundice and was in St. Anthony Hospital. No definite evidence of gallstones was found; however, the patient left the hospital before her physician recommended dismissal. Since that time there have been several attacks of severe right upper abdominal pain requiring morphine for relief. She has lost 28 to 30 pounds during the last four years. She was para 0 gravida 0. The menstrual periods had always been regular until the last menstrual period 10 days before admission which was scanty and dark, lasting one day.

Family History: Father died of pneumonia at the age of 55; mother of coronary disease at the age of 35.

Physical Examination: On admission the patient was acutely ill, but mentally alert. Respirations were shallow, 24 per minute. The temperature was 98.6° F., the pulse rate was 104. The blood pressure was 150/90. She appeared dehydrated, and the skin was cold and clammy. Breath sounds were vesicular throughout. Heart sounds were normal in rhythm and intensity with no murmurs heard. The abdomen was dome shaped. There was moderate bulging in the flanks. There were general abdominal tenderness and muscle spasm, more marked on the right. There were marked tympany on the left and dullness on the right. No fluid wave was discernible. Peristaltic sounds were exaggerated. There were no palpable or visible masses and no herniae. The pelvic examination was unsatisfactory on account of distention and rigidity of the abdominal muscles. There was evidence of a fluctuant mass in the cul-de-sac. Rectal examination was not contributory.

Laboratory Data: On September 27, 1947, the Mazzini test of the blood was negative. The blood amylase was 56; the hematocrit was 38 mm. The urea nitrogen was 13.9 mg., chlorides 378 mg., total protein 5.8 Gm. and the van den Bergh gave a faintly positive direct reaction and the indirect reaction was 0.8 mg. per cent. The urine was dark brown and acid, with a specific gravity of 1.025. It contained albumin three plus and a trace of glucose. There were occasional epithelial cells, innumerable red blood cells, and an occasional white blood cell per h.p.f. The white blood cell count was 14,700 with polymorphonuclear leukocytes 77 (juveniles four, stabs 31), lymphocytes 22, and monocytes one, per cent. There was auto-agglutination of the red blood cells and toxic granules were seen in the polymorphonuclear leukocytes. On October 2, 1947, the circulation time was 15 seconds; venous pressure was 12.5 cm. of normal saline; and the prothrombin time was 30 per cent of normal. The gastric juice had a pH of five, and gave a four plus reaction for blood. On October 3, 1947, the hematocrit was 60 mm. The cholesterol-cephalin-flocculation test was negative. Roentgenograms on August 18, 1947, revealed loculated gas beneath the anterior portion of the right diaphragm, and fluid in the right pleural cavity. Electrocardiograms on September 28, 1947, revealed complete left bundle branch block and the

heart in the vertical position with right axis deviation in the limb leads; and on October 15, 1947, revealed old, high anterolateral infarction with intramural block and the heart in the intermediate position. The red blood cell count was 4,030,000 with 14.5 Gm. of hemoglobin.

Clinical Course: The patient was given supportive therapy with intravenous glucose, amigen, whole blood and penicillin. Gastric suction was instituted. She seemed somewhat improved the next morning; however, during the day she developed auricular fibrillation which lasted for five hours. On September 29, 1947, she had a large bowel movement with the stool clay colored, and extremely foul smelling. On September 30, 1947, there was very little change except for some pedal edema. On October 1, 1947, she had less abdominal pain, and the lower abdomen was fairly soft with rigidity and tenderness mostly in the right upper quadrant of the abdomen. On October 2, 1947, she developed some cyanosis and dyspnea follow the rapid administration of intravenous fluids. Her temperature was fairly normal until October 3, 1947, when it was elevated to 101° F. It continued to spike to 101 or 102° F. each day. On October 5, 1947, she had three plus pitting edema of the dependent portions of the body. There were moist rales in both lung bases. The urinary output was decreased to 500 cc. She was dyspneic and cyanotic in spite of nasal oxygen therapy. Rapid digitalization was instituted. Moist rales were present in the posterior portions of the lungs. There was no chest pain. The abdomen was soft and flat with tenderness only to deep palpation in the right lower quadrant. Edema had become generalized. On October 17, 1947, roentgenographic examination revealed a subphrenic abscess with gas bubbles under the diaphragm. On October 21, 1947, at 3:15 P. M. there was a sudden onset of dyspnea, and rattling of fluid in the upper respiratory tract. The pulse rate was 140 and the temperature 101.4° F. The rate of oxygen given was increased. Before any other medications could be administered she became cyanotic and stopped breathing; the heart sounds slowly diminished. Intravenous digitoxin and intracardiac coramine were given without avail. Artificial respiration was continued for 15 minutes. She died on October 21, 1947, at 3:30 P. M. the 25th day following admission.

CLINICAL DIAGNOSIS

DR. O'LEARY: In approaching a diagnostic

problem such as this case obviously presents, it is difficult to rely entirely upon material such as that which has been presented to you and to me. It is difficult to determine which of this material is directly pertinent and which is non-pertinent and hence distractive. If we consider the information in chronological order, including that which antedated the present illness, we note that there were several attacks of severe right upper abdominal pain, and that upon at least one occasion there was jaundice. This turns our attention to a consideration of disease of the gall bladder and we shall keep this in mind in evaluating the present illness. We must remember, however, that the most common cause of jaundice is acute hepatitis, and that jaundice as a consequence of stone in the common bile duct, or as a result of extrinsic pressure upon the bile duct, rates well down the list in order of frequency.

Considering the present illness, we have the story of chill and fever, intense pain, vomiting and progressive distention of the abdomen. Perhaps one of the most significant facts is that the duration of life, after the first symptom of the present illness, was approximately seven weeks. There are several conditions which might be expected to lead to death in a period of approximately two months, and one or two of these might produce the signs and symptoms of which this patient complained. Those conditions extrinsic to the abdomen include first, coronary occlusion with *myocardial infarction*, and second, a *bacilar pneumonia*. We have evidence from electrocardiographic studies that there was an old cardiac infarct. Just how this would fit into the present picture is somewhat hard to evaluate. There are conditions of cardiac infarction in which abdominal symptoms predominate for a number of days, primarily on the basis of adynamic ileus. This seems quite unlikely, however. For one thing, we are told that respiratory failure occurred before cardiac failure. This is definite evidence against cardiac failure as the primary cause of death. Other data which would tend to lead us away from cardiac infarction as the primary disease here, is the presumptive x-ray evidence of a subphrenic abscess. Proceeding from this evidence, we must consider causes of subphrenic abscess. The most common cause of subphrenic abscess six to eight weeks following first symptoms is a *ruptured appendix*. We also know that the appendix accounts for at least three-fourths of all peri-

tonitis. It must not be ignored in conditions of this sort in any age group. Appendicitis is especially apt to give an atypical symptom complex in the older age group. It is difficult to explain chills and fever as the initial symptom in appendicitis, however. Chills and fever, coinciding with intense abdominal pain radiating into the chest and both infra-scapular regions, could characterize a perforated appendix, or the initial stages of a *pylethrombophlebitis*. In this case, with the past history at hand, I am directed more to consider *acute cholecystitis*. Frequently chills with fever is the first symptom of acute cholecystitis. It might be that this patient has had repeated attacks of cholecystitis, as a sequel of which she developed empyema of the gall bladder, and that the sudden attack of pain, with chills and fever, is related to necrosis of a portion of cystic duct impinged upon by an impacted gall stone. This could very well be a basis for peritonitis too. The patient seemed to recover, partially at least, from this acute attack. She became acutely ill again however, and at the time that she entered the hospital the evidence is strongly suggestive of acute peritonitis rather than adynamic ileus. I'm somewhat confused by the statement that a fluctuant mass was palpable in the cul-de-sac. It might be that this represented a soft mass of omentum.

Practically any abdominal catastrophe in which a patient has the prospect of living for six to eight weeks may be followed by sub-diaphragmatic localization of the infectious process. From a standpoint of frequency we would consider such catastrophes in this order: first, ruptured appendix; second, perforated peptic ulcer; third, cholecystitis with perforation of the wall. There is nothing here to suggest *peptic ulcer*, but we know that approximately 10 per cent of patients with perforated peptic ulcer have absolutely no previous history to suggest such a condition. This disease is more common in the male than female, but nevertheless it must be considered as a possibility in this patient. We must consider *acute pancreatitis*, and the blood amylase of 56 is, I believe, not sufficient to eliminate this as a possibility. This determination was made late in the course of the disease, and we know that blood amylase may be elevated only for a period of 24 hours or so following the acute onset. Ideally, several blood amylase determinations should be made at 12 and 24 hour intervals and correlated with a blood calcium determination the third or fourth day after the im-

mediate onset. It is not at all unlikely that this woman may have had an acute hemorrhagic pancreatitis. She has the proper background with evidence of past disease of the biliary tract including jaundice on one occasion. The pain that she suffered in this illness was intense and unrelieved by morphine. This might have been related to the immediate edematous phase of the disease, whereas the continued pain, over a period of days, might have indicated a progressive destruction of pancreatic tissue. We know that some 60 to 70 per cent of patients with acute pancreatitis survive the disease. Here again, statistical data are helpful in providing evidence which supports pancreatitis as an etiologic entity rather than perforated gastric ulcer since in the latter case, rarely does the patient live this long without surgical intervention.

There are several other conditions in the abdomen which we should at least mention, though they are relatively rare. One is acute massive abdominal hemorrhage, so-called *abdominal apoplexy*. Many of these cases occur on the basis of arteriosclerosis, and the hemorrhage may be derived from almost any artery within the abdomen. The presence of blood in the abdominal cavity produces a chemical peritonitis and shock, and could account for the picture which this woman presented. *Tabetic crisis* may give rise to acute abdominal pain, but as a general rule the patient recovers within a few days. There is nothing in this patient to suggest cerebrospinal syphilis.

Among the laboratory data, we are especially interested in the low blood chlorides and the plasma protein which is at about the level that edema becomes clinically evident. Peritonitis would be sufficient to explain these changes. In any event, they are indications of serious illness. Proteinuria, even to the extent of three plus is still quite in keeping with toxic damage to the kidney—an expected effect of acute peritonitis. Toxic granules in leukocytes, with a left shift, is further evidence of a severe state of toxemia. The hematocrit reading of 60 per cent is positive evidence of a considerable degree of hemococoncentration. This figure becomes more significant when we consider that this woman probably had an anemia, so that her hematocrit, under conditions of normal hydration, would have been expected to be below normal.

Summarizing, I conclude that this patient did have peritonitis, and that the peritonitis

was secondary to a lesion within the biliary tract, perhaps from perforation of the cystic duct at the point where a stone was impacted, with the subsequent development of a subphrenic abscess.

CLINICAL DISCUSSION

DR. HALPERT: Dr. McClure or Dr. Musick, would you care to make a comment?

DR. MCCLURE: I agree with Dr. O'Leary's conclusions. There is, however, one point I should like to comment upon, and that is the progressive pedal edema which was observed during the patient's course. It seems unlikely that this was a consequence of congestive failure, but rather that it was related to hypoproteinemia and perhaps to local phenomena interfering with venous return from the lower extremities.

DR. MUSICK: I think that this picture could well be explained on the basis of a primary disease of the gall bladder and biliary tree, but I think that a ruptured peptic ulcer is also a likely possibility and one which merits equal consideration.

QUESTION: What is the explanation of the clay colored stools alternating with colored stools?

DR. O'LEARY: I was puzzled by this observation during the patient's hospital course. I think that it must signify intermittent obstruction to the flow of bile into the duodenum.

ANATOMIC DIAGNOSIS

DR. HALPERT: This was a difficult problem, not only from the clinical viewpoint, but one which presented certain difficulties to the pathologist even after adequate visualization of the changes which had actually occurred in the abdominal cavity. In spite of the illness of nearly two months, this woman was still moderately well nourished and had a two and one-half cm. layer of adipose tissue in the anterior abdominal wall. There was moderate pitting edema of both lower extremities extending up to the mid thigh. Upon opening the abdominal cavity, a considerable amount of creamy brown liquid was encountered. This was largely localized to the right side of the abdomen, and was most prominent over the right lobe of the liver; however it extended down, reaching almost to the pelvis. It also extended across the liver, under the diaphragm, so that a small amount of this purulent exudate was present under the left dome of the diaphragm. The appendix was outside this area and was not abnormal, so that we could exclude this as a cause of the peritonitis. The

gall bladder was somewhat smaller than usual. Its wall was thickened, but its serosal surface was not involved in this acute inflammatory process. The common bile duct was moderately dilated and in the lower portion of the common duct there was a concretion 1 x .8 cm. which seemed to completely fill the common duct at this point, although it was not tightly impacted. This was just at the level of the pancreas. The pancreas surrounding this area was markedly discolored, green, red and yellow, with multiple putty-like areas seen on the external and cut surfaces, indicative of pancreatic fat necrosis. Both pleural cavities contained excess fluid, 500 and 250 cc. respectively. Thus there was edema of the pleural cavities as well as of the lower extremities. We found at least a partial explanation for this when the heart was examined. The apex was rounded and there was moderate dilatation, especially of the left ventricle. The heart was but slightly increased in weight, however. Coronary arteries were markedly stiffened and numerous atherosclerotic plaques were evident upon multiple cross sections, particularly in the anterior descending branch. In the area supplied by this artery, the anterior portion of the septum and adjacent left ventricle, there was considerable interstitial fibrosis. Here the wall was thinned to about half its usual thickness. At the apex there was almost complete fibrous replacement of myocardium and at one point the wall was so thin that it was translucent. This was an old infarct that had become organized.

Histologic studies confirmed the conclusions drawn from gross observations and our final anatomic diagnosis was as follows:

Cholecystitis, chronic, with cholelithiasis with gallstone in common bile duct

Pancreatitis, chronic and acute, with fat necrosis and peritonitis, chronic and acute, with subdiaphragmatic abscesses

Sclerosis of coronary artery, left, with scarring of myocardium

Chronic passive congestion of viscera with hydrothorax, bilateral

Bronchitis, bronchiolitis, with pneumonia, focal, bilateral

Deformity and atrophy of lower extremity, right, postpoliomyelitic

Now, to consider pathogenesis of this condition. It seems most likely that because of the position of this stone, because of the clinical observation of intermittent obstruction of the flow of bile, and because the obstruction occurred below the juncture of the common hepatic duct and the pancreatic duct, that bile was allowed to extend up through the pancreatic duct and to reach the pancreas, there activating pancreatic enzymes and bringing about the acute pancreatitis which was the most significant disease that this patient presented. You will recall that the pancreas is one of the most important organs from the standpoint of production of digestive ferments in that it produces trypsin, amylase, and lipase. These are very potent enzymes and are certainly capable of digesting pancreatic tissue if they become activated at that site. Bile is one of the substances that will activate these enzymes locally. The areas of chalky or putty-like deposition which are so characteristic of pancreatic fat necrosis actually are a direct result of the action of lipase upon fats, breaking them down to glycerol and fatty acids. The glycerol diffuses away but the fatty acids unite with calcium, sodium and potassium to form soaps. The peculiar appearance which has been described is actually the effect of soap formation. There is evidence that at least a part of the pancreatitis from which this woman suffered is of such age as to coincide with the presenting symptoms in the present illness. We feel therefore that this was the primary disease and the cause of death. To turn again to the cardiac complication, evidence of at least mild congestive failure is presented by chronic passive congestion of viscera and the edema of the lungs, as well as of the other portions of the body. This was incidental and a rather minor complication.

CLINICAL DISCUSSION

DR. HALPERT: Would you care to comment, Dr. O'Leary?

DR. O'LEARY: I have little to say except that this illustrates an important point, namely, that any patient coming into a hospital with an acute abdominal emergency deserves the consideration that acute pancreatitis may be the cause.

President's Page

Recently I was privileged to attend the Annual Meeting of the National Physicians Committee held in Chicago and to see and hear first hand of the work being done by this organization in helping to keep America a land of opportunity with particular emphasis being placed on compulsory health insurance.

At the meeting were representatives of the dental and medical professions from 44 and 47 states respectively, augmented by the medical leaders of the A.M.A. and dental profession.

The two day meeting was replete with formal and informal discussions of the methods being adopted by certain persons and groups who would change our government from one in which the people govern to one which governs the people. One could not help but be impressed with the thoroughness of the preparation of the meeting and the far-reaching effective work being done by the N.P.C.

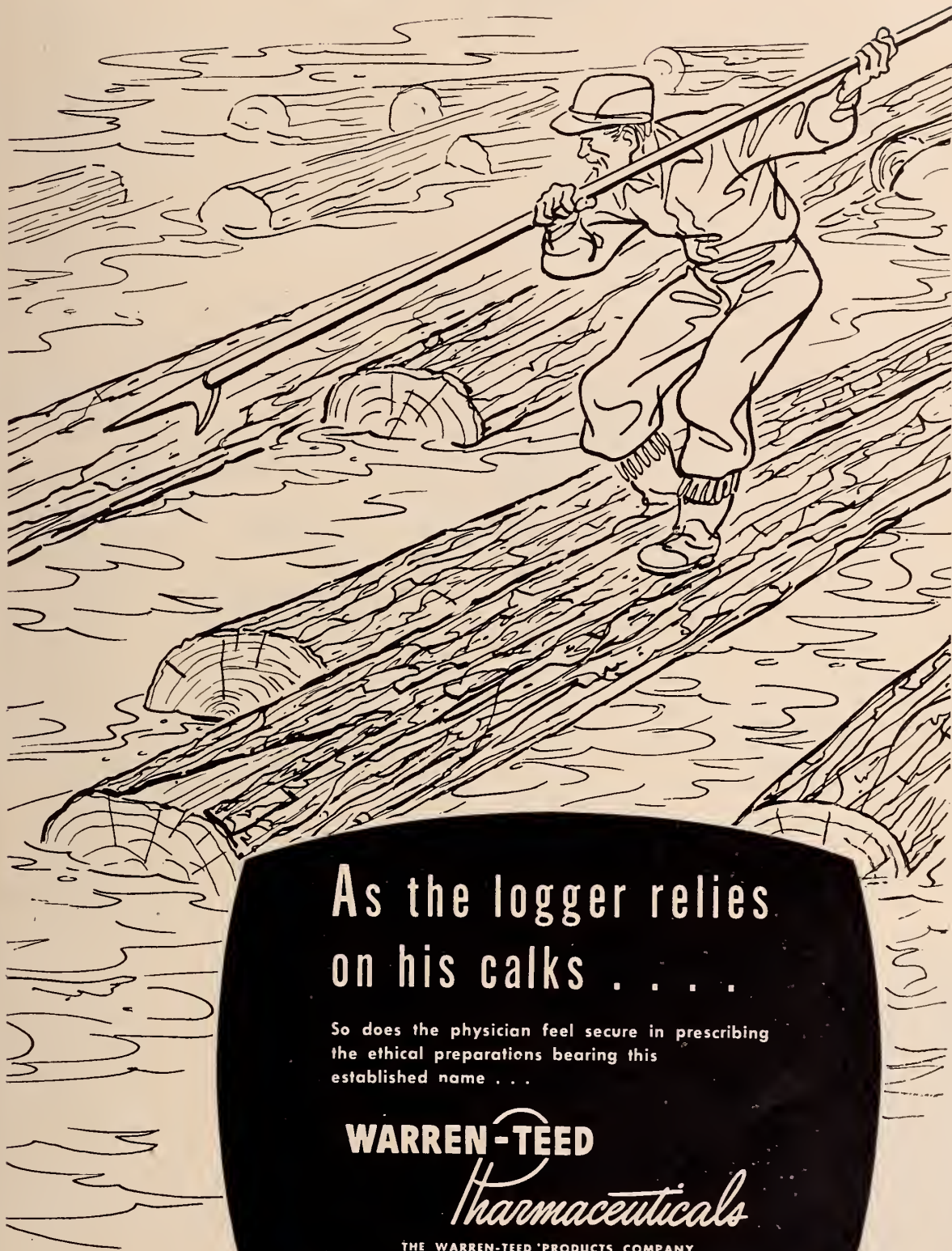
The N.P.C., which has rapidly grown from its swaddling clothes, deserves and must have the unqualified support of the medical and allied professions.

Dr. Finis W. Ewing of Muskogee and Dr. W. Jackson Sayles of Miami represented the Oklahoma Committee of the N.P.C. and they justly deserve all of our support in their future efforts to make their committee a more effective organization here at home.

The N.P.C. is doing a job for the people and our profession —let us do a job for the N.P.C.

C. E. Northcutt

President.



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GENERAL NEWS

FIFTY YEAR PINS PRESENTED IN VARIED CEREMONIES

A tiny gold lapel pin with an embossed caduceus (the symbol of the medical profession) and the inscription "50 Year Club" in the center and "Oklahoma State Medical Association" around the outside is now an identification mark to be envied among O.S.M.A. members. Three more of the coveted awards have been made recently with several more scheduled to be presented soon. New wearers of the pins are Argustin M. Shi, M.D., Stratford; Thad C. Leachman, M.D., Woodward; and C. M. Maupin, M.D., Waurika.

Dr. Leachman's pin was presented to him at a special 50 year anniversary celebration at Woodward when he was host at a reunion honoring all the babies that he has delivered. More than 3,000 were invited. Dr. Leachman, who will be 74 in October, began practicing in 1898 in Brodnax, La. He first began practicing in Woodward County at Richmond in 1904 and later settled at Woodward.

Recalling his early day experiences, Dr. Leachman said, "It was necessary for me to swim the North Canadian river many times day or night after getting to its banks on horseback, because there were no bridges at that time. I always kept three teams available at Richmond (Woodward County) and on occasion had to use fresh mounts from stables located at Cestos, Mutual, Cedardale and Chester. My territory probably embraced 100 miles in all directions. My longest trip was 60 miles from Richmond to Arapaho, and I made it slowly but surely with team and buggy."

C. E. Northcutt, President of the O.A.M.A. presented the 50 year pin to Dr. Leachman.

At a meeting of the Garvin County Medical Society, a joint presentation was made by Dr. Northcutt. Augustiu H. Shi, M.D., was presented a 50 year pin and Robert M. Alexander, Paoli, was presented a life membership in the Oklahoma State Medical Association.

Dr. Shi was born at Forsythe, Ga., October 10, 1873, and moved to Hawthorne, Fla., before coming to McGee, Indian Territory, in 1896. He obtained his degree at Fort Worth University, in 1898, but like many of the

physicians of that time, began his practice before receiving his degree. In 1906 the McGee townsite was moved and is now the present town of Stratford, Okla., where he has practiced continuously for 52 years. Dr. Shi recalls "early modes of transportation were via horseback and horse and buggy until the appearance of the model T Ford. Then during rainy seasons we reverted to horse and buggy."

Dr. Shi comes from a family of doctors. His father was Augustiu Henry Shi, M.D., of Georgia and one of his brothers was the late Pat Shi, M.D., of Blanchard, Okla. Two paternal uncles and three maternal uncles were physicians. Dr. and Mrs. Shi have three children, Mrs. J. C. Denham, Maysville; Mrs. O. C. Robertson, Norman, and A. H. Shi, Jr., Stratford.

C. M. Maupin, M.D., whose 50 year pin was presented at an open house celebrating his 50th wedding anniversary, also is one of a family of doctors. Dr. Maupin's father began his practice near Charlottesville, Va., and the Maupin estate joined Monticello.

Dr. Maupin was born August 29, 1874, at Crown City on the banks of the Ohio and received his early education there entering Barnes Medical College at St. Louis in 1893 and was graduated in April, 1897. The summer of 1898 he practiced in Papinville, Mo., and moved to Webb City, Mo., later where he remained until the opening of the Kiowa-Comanche country August 1, 1901. Dr. Maupin located at Lawton before a house was built on the town site and practiced there until 1905 when he moved to Waurika. He has been a member of the O.S.M.A. since the amalgamation of the two territorial medical association and is also active in the Masonic Lodge, Odd Fellows, Lions Club and is a member of the Board of Stewards of the Methodist church. He was voted a Life member of the O.S.M.A. in May, 1948. E. S. Lain, M.D., Oklahoma City, a past president of the O.S.M.A., made the presentation.

J. R. B. BRANCH, M.D., NAMED DIRECTOR OF CANCER SOCIETY

J. R. B. Branch, M.D., for two years postgraduate instructor in gynecology in Oklahoma, has been appointed director of the Oklahoma Division of the American Cancer Society and will assume his new duties January 1.

H. D. Clark, newspaper reporter and editor of the bulletin of the Oklahoma Society for Crippled Children is the temporary acting director until Dr. Branch takes over upon completion of the present postgraduate course.

Dr. Branch received his medical and pre-medical training at Johns Hopkins University and was resident house officer, gynecological service, Johns Hopkins Hospital. He was resident surgeon, including gynecology, at the Macon Hospital, Macon, Ga., and from 1910 to 1915 was attending gynecologist, while in private practice, at the Macon Hospital. From 1915 to 1927 Dr. Branch practiced and taught gynecology as well as surgery at the Hunan-Yale Medical School, Changsha, China. He has had additional study at Hopkins, Mayo Clinic and others in Chicago and Buffalo and toured Europe for study in gynecological clinics in Edinburgh, Belfast, Dublin, London and Paris, under Rockefeller Foundation fellowship. Since 1943 he has conducted postgraduate courses in Tennessee, New York, Baltimore and Oklahoma.



Robert M. Alexander, M.D., Paoli, is shown above receiving his lifemembership certificate from C. E. Northcutt, M.D., O.S.M.A. president.



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1. Orgain, E. S.: The Treatment of Congestive Heart Failure, North Carolina M. J. 8:125 (March) 1947.

*Searle Aminophyllin contains at least 80% of anhydrous theophylline.

COUNTY OFFICERS HAVE ANNUAL CONFERENCE

Speaking on "The Consumer's Attitude Toward Medicine," John I. Taylor, Mountain View, delivered the principal address at the dinner of the annual conference of county and district medical society officers held Sunday, September 19, at the Jade Room of the Skirvin Hotel, Oklahoma City. Mr. Taylor, who is president of the Oklahoma Farm Bureau, went far toward pointing up the needs which are receiving emphasis in the present programs of the association as he brought out in an unbiased and frank manner the opinions and needs of the lay public.

The conference, which began at 9:30 A.M., was an all day meeting. Among the topics considered at the morning session was a report of the committee for revising the councilor districts which was submitted by Finis Ewing, M.D., Muskogee, chairman of the committee. C. E. Northcutt, M.D., president of the O.S.M.A., led the discussion with the view to securing appropriate action by the county medical societies. Sample constitutions were submitted to be used by all county officers in drafting constitutions for those counties in which none are now in existence and for revision for those which may require revising to bring them into agreement with the constitution of the state association.

McClain Rogers, M.D., Clinton, chairman of the public policy and publicity committee, presented the outlook of the medical profession in regard to the present political situation, the coming campaign and the 1949 sessions of the state and national legislatures.

Col. Clive Murray, director of the Oklahoma selective service system, presented a resume of the operation of the new selective service law, the possibility of medical service for physicians and the cooperation of the medical profession which will be required in making the system workable.

There was also a discussion of administrative cooperation between county and district societies and the executive office in an attempt to simplify for officers of the county societies the proper handling of membership reporting, transfers, submission of nominees for honorary, life and associate membership and the 50 year club and malpractice insurance applications.

Dr. Ewing, chairman of the public policy committee, and W. Jackson Sayles, M.D., Miami, secretary-treasurer of the committee, reported in detail on the meeting of the National Physicians Committee held in Chicago September 5 and 7. The report of Dr. Ewing and Dr. Sayles tied in with Dr. Rogers' discussion in indicating the need for unified action by the profession in political matters.

The afternoon session was given over to reports of the sub-committees of the public policy committee. They are: newspaper, radio, awards, contests and literature, visual education, professional relations, and public speaking.

Aims and purposes of the Women's Auxiliary were presented by Mrs. Neil W. Woodward, Oklahoma City, president of the Women's Auxiliary of the O.S.M.A.

County officers were brought up to date on hospital construction of the Hill-Burton act by Mr. George Kester, engineer, Oklahoma State Department of Health. Mr. Paul Snelson, director of the hospital division of the health department presented the discourse on interpretation of the hospital inspection act which served to clarify the law for all concerned with hospital operation.

OPHTHALMOLOGISTS SUBJECT TO NEW JUDGMENT

Final judgment has been entered in the federal district court of Chicago in the case of the United States of America vs. the American Optical Company et al. It was a consent decree.

The judgment was entered under the authority of the Sherman Anti-Trust Act. Effects of the judgment are as follows: each of the ophthalmologists consenting to the decree were perpetually enjoined from "accepting either directly or indirectly from any dispenser of ophthalmic goods (whether such dispenser acts or purports to act as an agent of the doctor, or otherwise) the payment of any rebates or credits of any part of the purchase price paid by any patient of said doctor for spectacles or parts thereof; or participating in any plan or program with any dispenser of ophthalmic goods whereby said doctor receives directly or indirectly any part of the purchase price of spectacles or parts thereof sold by said dispenser or prescription to any patient of said doctor."

The decree also provided that any physician, other than those entering into the consent decree, may become voluntarily subject to the judgment.

"TELL ME, DOCTOR" NOW HEARD THROUGHOUT THE STATE

Eight Oklahoma radio stations are now broadcasting the "Tell Me, Doctor" series of programs sponsored in conjunction with the Oklahoma State Medical Association and local radio stations or sponsors.

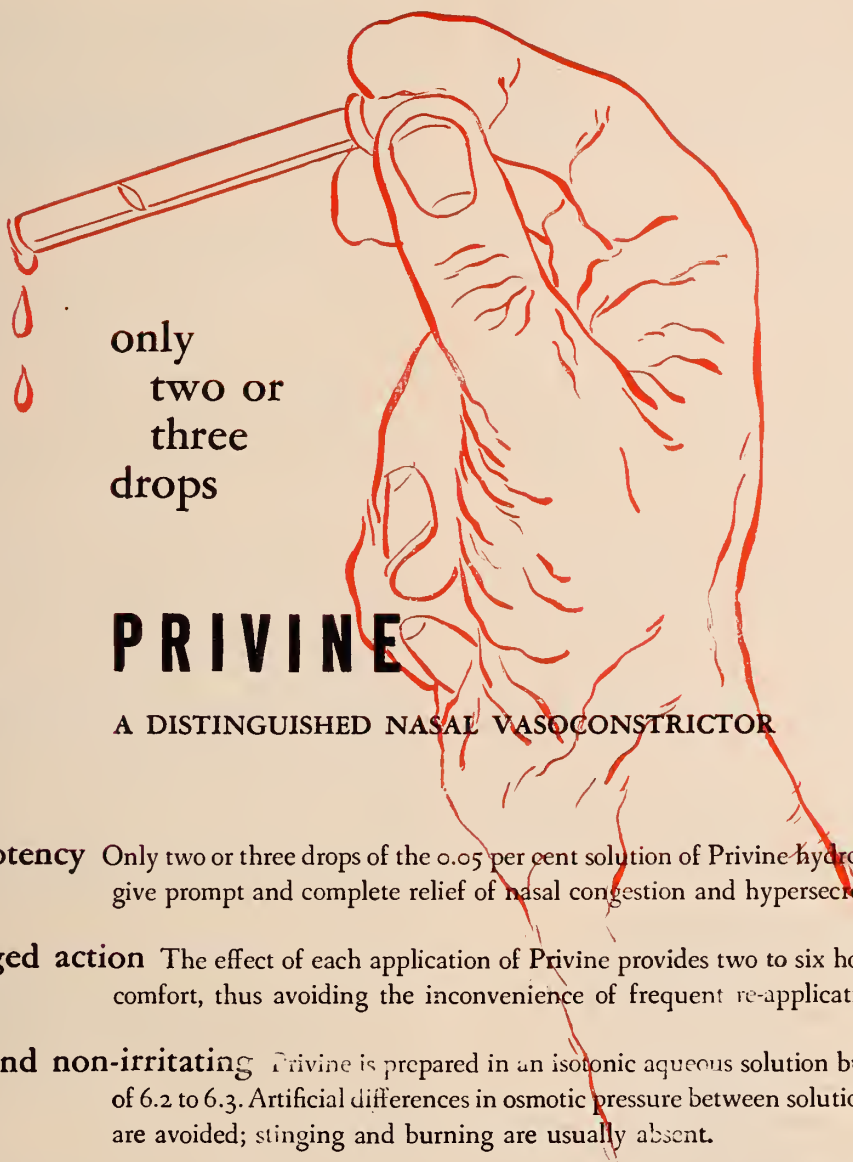
Stations the program can now be heard on are Bartlesville, Durant, Ponca City, Tulsa (KTUL), Oklahoma City (KOCY), Duncan, Ada and Stillwater, making it possible to listen to the program in all sections of the state.

Plans are being made at the present time to conduct a survey to determine what per cent of the residents of the above cities are listening to the program regularly. The survey will be made by telephone by members of the Women's Auxiliary of the O.S.M.A. and will be conducted in the standard radio survey way. Mimeographed forms to enter the calls and results of the calls are being drawn up at the present time and will be distributed to the auxiliaries soon.

ATTENTION COUNTY SECRETARIES!

For two months the column "Medical Societies Around the State" has not appeared in the Journal as many of the county societies discontinued meetings during the summer months. But now we urge you to send in any material about your county society meetings to the Journal office, 210 Plaza Court, Oklahoma City, so members over the state will know what your society is doing.

Material published in past months was incomplete because all news was taken from clippings supplied to our office from the clipping service with the result that many society meetings were left out. From now on, we'd like to have the "who, what, when, where, why or how much" of your county meeting in a paragraph or two or send us the clipping from your local newspaper.



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high potency Only two or three drops of the 0.05 per cent solution of Privine hydrochloride usually give prompt and complete relief of nasal congestion and hypersecretion.

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MORE STUDENTS ADMITTED TO O.U. MEDICAL SCHOOL

By affiliation with other Oklahoma City hospitals, the board of regents has secured additional teaching beds making it possible for 64 freshmen to enter the University of Oklahoma School of Medicine this term. A total of 259 students are now enrolled in the medical school, according to Homer F. Marsh, Ph.D., associate dean of students.

Before arrangements were made with the other hospitals for both in-patient and out-patient teaching beds, it would have been possible to admit only 52 freshman students. Hospitals cooperating in the plan are Will Rogers, St. Anthony, Mercy and Wesley, making 686 beds available including those at University Hospital.

Of the 64 new students, 63 are men and one is a woman student. Fifty-nine are veterans. Seventeen hundred requests were received from out of state for admission to the medical school but the class was selected from 265 Oklahoma applications with none accepted from out of state. The 64 enrolled represent 42 of Oklahoma's 77 counties.

Related to the medical school enrollment is the class that began September 1 at the University of Oklahoma School of Nursing, Oklahoma City. The largest class to ever be enrolled at the school, surpassing even the war years, 66 freshmen are beginning their training, reports Mrs. Mary R. Caron, director of the school of nursing.

A ward in the new wing of University Hospital is now open and will accommodate 36 patients, adding more teaching beds for the medical school, it was pointed out.

The Oklahoma medical school plan to provide additional teaching beds is part of a nation wide plan to admit a larger number of students to the medical schools without lowering educational standards.

COUNCILOR DISTRICT MEETINGS HELD

Beginning September 28 and running through October 15, councilor district meetings were held in each of the councilor districts throughout the state with the exception of district number six (Tulsa) which will be held sometime after the first of the year.

The purpose of the members of the council planning these meetings was to take to the individual physicians in their districts the complete program of the Oklahoma State Medical Association, not only to provide information for the members of the association but to secure new ideas and reactions among the members of the profession. If general enough in scope, the new ideas may make necessary additions or changes and revision of the programs now being conducted.

The recommendations of the house of delegates of the last annual meeting, which required action by the county societies, such as re-chartering of all societies and drafting and revision of the constitution and by-laws, were among the suggestions discussed. The public policy program of the state association and the part each member and each society can play in making that program effective was presented by John F. Burton, M.D., Oklahoma City, chairman of the public policy committee. Re-formation of the councilor districts as proposed by the committee for that purpose was discussed. That committee is headed by Finis W. Ewing, M.D., Muskogee. The plan recommends the formation of 14 councilor districts instead of the present 10 in an effort to equalize the representation of each district

and to render the districts more compact geographically.

Other subjects felt to be of interest by the individual councilors were discussed by the officers of the association and representatives of the executive office.

MEDICINE OF THE YEAR

The Oklahoma State Medical Association has made arrangements to secure, through its Journal, *MEDICINE OF THE YEAR* for those of its members who wish to subscribe. *MEDICINE OF THE YEAR* is an annual review of medical progress which will appear as a supplement to the Journal early in 1949. It will be a descriptive and analytical account of progress in medical science and practice during the preceding year, presented in a practical, useful, and informative manner, particularly as they relate to the everyday practice of general medicine and the specialties.

The editorial management is under the direction of Dr. John B. Youmans, Dean, College of Medicine, University of Illinois. The principal contributors and their subjects are the following well-known medical educators and writers:

Internal Medicine, Dr. Hugh J. Morgan, Professor of Medicine, Vanderbilt University, Nashville, Tennessee.

Obstetrics, Dr. Frank Whitacre, Professor of Obstetrics and Gynecology, Memphis Tennessee.

Pediatrics, Dr. Henry G. Poncher, Professor of Pediatrics, University of Illinois, Chicago, Ill.

Surgery, Dr. Warren H. Cole, Professor of Surgery, University of Illinois, Chicago, Ill.

These men will have associated with them an equally competent and distinguished group of authors in special fields.

This annual review of medical progress is being offered to members of state medical societies and subscribers to state medical journals. The subscription price is \$1.35 annually.

In order to secure this service, subscriptions from approximately one-third of our members are required. Because of the short time available, subscriptions must be entered promptly. Do not delay. Send in the coupon below, or write directly, sending check or money order. If an insufficient number of subscriptions is obtained, no obligation will be incurred and your money will be refunded. Act now!

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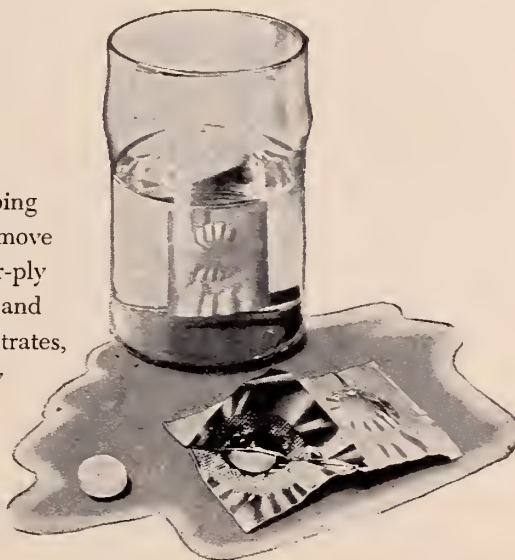
Used alone — not merely as adjuvant therapy — “orally administered penicillin is therapeutically successful even in serious infections, if a sufficiently high dose is given.”¹

By giving oral penicillin in doses of 100,000 units every 3 hours (often preceded by an initial “booster” dose of 200,000 units), clinicians have successfully treated pneumococcic lobar pneumonia, gonorrhea, and other infections, both acute and serious. Oral administration in high dosage produces penicillin serum concentrations within the antibacterial range of most susceptible pathogens. If prompt response is not obtained, parenteral treatment should be instituted immediately.

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¹. Hoffman, W. S., and Volini, I. F.:
Am. J. M. Sc. 213:520 (May) 1947

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LAST CIRCUIT OPENS

The last circuit in the postgraduate course in gynecology will open October 18. Tentative teaching centers are: Guthrie on Monday nights, Clinton Tuesday nights, Watonga Wednesday nights, El Reno Thursday nights and Oklahoma City colored doctors Friday nights. Any doctors who would like to make up lectures they have missed will be welcome to attend at any of the foregoing centers.

The Postgraduate Committee is now attempting to obtain a competent, adaptable instructor for a two-year course in internal medicine. A meeting of the committee was held in September at which time Dr. Harry E. Handley of The Commonwealth Fund, New York City, was present to discuss funds for future courses.

The Commonwealth Fund has been very liberal in their financial support of these postgraduate programs. It is their desire that the courses become self supporting and the committee has been working with this thought in mind. Suggestions as to how the postgraduate work in the state may become self-supporting will be welcomed by the Postgraduate Committee.

The Oklahoma State Health Department, through the Commissioner, Dr. Grady F. Mathews, has also been very liberal in their financial support of these courses. They have cooperated with the Postgraduate Committee in every way.

The Committee members are: Gregory E. Stanbro, M.D., Chairman, Oklahoma City; Floyd T. Bartheld, M.D., McAlester; J. William Finch, M.D., Hobart; R. C. Gentry, M.D., Bartlesville; O. R. Gregg, M.D., Norman; W. A. Hyde, M.D., Durant; John F. Kuhn, Jr., M.D., Oklahoma City; Harold H. Macumber, M.D., Chickasha; O. L. Parsons, M.D., Lawton; C. J. Roberts, M.D., Enid; Homer A. Ruprecht, M.D., Tulsa; Fred W. Sellers, M.D., Mangum; Wendell L. Smith, M.D., Tulsa, and I. F. Stephenson, M.D., Alva.

Members are urged to contact the committee member in your area and give him any suggestions you may have to improve these programs and your areas of how they can and will become self-supporting.

APPLICATIONS ASKED FOR ARMY RESIDENT TRAINING

Applications for the military resident training program (in army general hospitals) are currently being received in the Office of the Surgeon General. Under this training program any physician who qualifies for and accepts a commission in the regular army medical corps will be given the opportunity of competing for an approved residency in the field of his choice.

COUNCIL ON MEDICAL SERVICE TO MEET IN TULSA

All physicians of Oklahoma are invited to attend the South Central Regional Conference of the Council on Medical Service of the American Medical Association which will convene in Tulsa November 13 and 14 at the Mayo Hotel. States participating are Arkansas, Kansas, Louisiana, Missouri, Texas and Oklahoma.

Program for the meeting will be conducted on the panel discussion plan with outstanding speakers from the A.M.A. and from the states represented. Among the program topics are "Why Get Together?", the opening welcoming address, James R. McVay, M.D., chairman, Council on Medical Service of the A.M.A.; J. D. McCarthy, M.D., Omaha, will be moderator at the roundtable on "What We Expect from the A.M.A. and the Council on Medical Service"; "Medical Aspects in the Next National Emergency," James C. Sargent, M.D., chairman of the council on National Emergency Medical Service, Milwaukee; "Medical School Influence on the Practice of Medicine," Franklin D. Murphy, M.D., University of Kansas Medical Center, Kansas City, Kans.; "Hospital Encroachment on the Practice of Medicine."

James Stevenson, M.D., Tulsa, will lead the discussion on the National Health Assembly and its significance to the medical profession and the public; and Thomas A. Hendricks, secretary of the Council on Medical Service of the A.M.A. will discuss the conflict as to methods of rendering medical and hospital service. Joseph S. Lawrence, M.D., director of the Washington office of the A.M.A. Council on Medical Service, will speak on the effects on future legislation. Principle address at the dinner Saturday evening will be "Wake Up, Doctor! Wake Up!" by John I. Taylor, president, Oklahoma Farm Bureau Federation. The Sunday morning session will be arranged by Allen T. Stewart, M.D., Lubbock, Texas, member of the A.M.A. committee on rural medical service.

APPOINTMENTS MADE

Appointment of several county superintendents of health has been announced by G. F. Mathews, M.D., commissioner of health of the State of Oklahoma. They are: C. D. Dale, M.D., Atoka, Atoka County; O. R. Gregg, M.D., Norman, Cleveland County; R. J. Shull, M.D., Hugo, Choctaw County (part time temporary appointment); Thomas E. Rhea, M.D., Idabel, McCurtain County; J. M. McMillan, M.D., Vinita, Craig County, and Charles I. Girod, M.D., Anadarko, Caddo County.

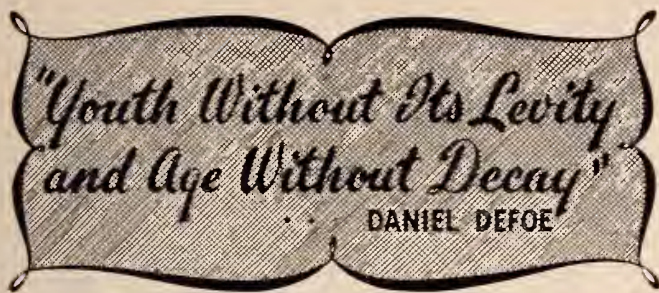
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ANNOUNCEMENTS

American Goiter Association. Hotel Loraine, Madison, Wis., May 26, 27, 28, 1949.

American Board of Obstetrics and Gynecology, Inc. Changes have been made in the board requirements and new bulletins are now available for distribution upon application. These relate both to candidates and to hospitals conducting residency services for training. Applications accepted until November 1, American Board of Obstetrics and Gynecology, 1015 Highland Building, Pittsburgh 6, Pa.

San Antonio Society of Pathologists. Fifth Annual tumor seminar set for October 23, fourth annex, Brooke General Hospital. Warren Shields, M.D., will conduct the seminar on "Diseases of the Reticulo-Endothelial System."

Southern Atlantic Association of Obstetricians and Gynecologists. Authors of papers on obstetrics and gynecological subjects desiring to compete for "The Foundation Prize" are asked to write Dr. E. D. Colvin, secretary-treasurer, 1259 Clifton Road, N. E., Atlanta, Ga.

American Urological Association. The American Urological Association offers an annual award (total \$1000) for essays on the result of some clinical or laboratory research in urology. First prize essay will appear on the program of the A.U.A. at the Biltmore Hotel, Los Angeles, May 16-19, 1949. For information write the secretary, Thomas D. Moors, M.D., 899 Madison Ave., Memphis, Tenn., by February 15, 1949.

American Diabetes Association. National Diabetes Week has been set for December 6-12 and district, state and county medical societies are urged to lead the fight against diabetes by planning special programs during that week.

American College of Surgeons. Twenty-seventh annual hospital standardization conference will be held at the Biltmore Hotel, Los Angeles, October 18-22 in conjunction with the 34th annual clinical congress of the American College of Surgeons. Paul H. Fesler, Oklahoma City, is scheduled as one of the speakers.

National Society for Crippled Children and Adults. Twenty-eighth annual convention will be held at the LaSalle Hotel, Chicago, November 15-17.

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HAVE YOU HEARD?

W. R. Miller, M.D., formerly of Calumet, has been added to the staff of the Taloga hospital.

William G. Husband, Jr., M.D., son of the late William G. Husband, M.D., of Hollis, has been named house physician at Southwestern Hospital, Lawton.

R. K. Goddard, M.D., Skiatook, was named commander of the Galentine-Prince Post No. 131 of the American Legion recently.

Floyd Simon, M.D., and *Ralph Simon, M.D.*, have opened offices for the general practice of medicine and surgery in Clinton. Both were graduated from the University of Oklahoma School of Medicine and have served in the army medical corps.

John L. Day, M.D., Woodward, spoke on "World Affairs Today" from a mental and spiritual viewpoint at a recent meeting of the Woodward Lions Club.

James L. Patterson, Jr., M.D., has recently returned to his practice in Duncan after spending some time with a San Diego hospital.

R. D. Anspaugh, M.D., Oklahoma City, spoke at a recent meeting of the Okfuskee County Medical Society. Dr. Anspaugh delivered a paper on "Prenatal Care in Toxemias."

Edward M. Farris, M.D., Medical Arts Building, Oklahoma City, reports that a group is being organized to promote and stimulate medical research among its members. Anyone interested in active participation and contribution to such a group is urged to contact Charles M. O'Leary, M.D., J. Moore Campbell, M.D., or Dr. Farris. All are in the Medical Arts Building in Oklahoma City.

EXTENSION COURSES FOR ARMY NURSES

The army nurse corps has just announced that, in connection with its expanded educational program, extension courses are now available to reserve nurses, covering a variety of topics in military orientation and hospital administration. Interested reserve nurses should address inquiries to the Director, Medical Field Service School, Brooke Army Medical Center, Ft. Sam Houston.

MEDICAL SCHOOL

Martin Dale Edwards ('45) has recently established an office at 4420 S. E. 28th St., Oklahoma City.

William H. Reiff ('41) has opened offices at 400 N. W. 13th St., Oklahoma City. Dr. Reiff is limiting his practice to the field of internal medicine.

William E. Price ('41) was a recent visitor to the school. He is with the navy and his address is H & S Bn., Medical Section, First Marine Division, Camp Pendleton, Oceanside, Calif.

John F. Hackler ('33) professor of preventive medicine and public health, has resigned his position with the school of medicine to accept that of director of the Muskogee city-county health department.

COMMITTEE REPORTS ON STUDY OF NURSING PROBLEM

In a report submitted to the House of Delegates of the A.M.A., a five-man committee, appointed by past-president Edward L. Bortz, Philadelphia, at the Atlantic City meeting to study the nursing problem in the United States, estimated that there are about 342,737 nurses now available.

A bulletin issued by the Women's Bureau of the U. S. Department of Labor indicates that 550,000 nurses will be required to care for the American people in 1960 if current standards of nursing are maintained, the committee report said, adding: "The bulletin also states that to accomplish this, 50,000 nurses must be graduated each year from 1951 to 1960. The largest number ever graduated was 44,700 in 1947."

DO YOU KNOW?

That while on a recent trip to California, O. E. Templin, M.D., Alva, appeared on the "Breakfast in Hollywood" radio show which originates in Hollywood?

Dr. Templin appeared on the program with his daughter and son-in-law and the late Mrs. Templin's sister and other relatives. The group received two dozen roses and a foot-long cigar for being the largest party present and having the oldest ages.

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1. Follis, R. H., Jackson, D., Eliot, M. M., and Park, E. A.: *Am. Jour. Dis. Child.*, 66:1, July, 1943.
2. Stearns, G.: *Jour. Lancet*, 63:344, Nov., 1943.

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TWENTY-FIVE YEARS AGO

Editorial Notes—Personal and General

Dr. Fred S. Clinton, Tulsa, has returned from a vacation spent in Colorado.

Dr. and Mrs. A. C. Hirshfield, Oklahoma City, spent their vacation in Colorado.

Dr. G. E. Stanbro, Pawhuska, has returned from a postgraduate course at Chicago.

Dr. J. L. Day, Norman, is planning a new two story brick colonial residence, to be built soon.

Dr. T. S. Williams, Stilwell, visited Tennessee and Kentucky points in August and September.

Dr. Carl J. Puckett, Pryor, has returned from a profitable time attending the clinics at Chicago.

Dr. and Mrs. C. H. McBurney, Clinton, have returned from an auto trip to the California coast and Canada.

Drs. Fenton Sanger and Winnie M. Sanger, Oklahoma City, returned recently from a motor trip to Colorado.

Dr. and Mrs. W. H. Aaron, Pawhuska, returned recently from Kausas City where Dr. Aaron had been for two weeks.

Dr. Roscoe Walker and family, Pawhuska, returned home after enjoying an extended vacation in Minnesota; Dr. Walker attending clinics there.

Dr. and Mrs. Harry D. Murdock, Tulsa, who have been making an extended motor trip through Mexico, California and the Northwest, returned home recently.

OBITUARIES

Ben Bell, M.D.
1915-1948

Ben Bell, M.D., Oklahoma City, was killed instantly September 5 when the plane he was piloting crashed near Oklahoma City.

Dr. Bell's home was at 2405 N. W. 32. He practiced clinical neurology and psychiatry at the Coyne Campbell Sanitarium in Oklahoma City.

Born on the island of Panay in the Philippines where his father was a school supervisor, he moved to Oklahoma City from Arkansas and had lived there 25 years.

He was graduated from the University of Oklahoma School of Medicine in 1942 and did six months postgraduate work in the neuro-psychiatric institute at Columbus University, New York City, and studied two months in St. Elizabeth Hospital, Washington, D. C. He served three years in the navy. Since 1946 he has been neuro-psychiatric instructor at the University of Oklahoma School of Medicine. He was a 32nd degree Mason, a Shriner, member of Phi Chi medical fraternity and a member of the American Psychiatric Association.

He is survived by his widow, his mother and two brothers.

Resolution

WHEREAS, Isham L. Cummings, M.D., of Ada, Oklahoma, died suddenly on July 23, 1948; and,

WHEREAS, Dr. Cummings had practiced medicine

in Ada for 35 years, and had always been a loyal supporter of organized medicine; and,

WHEREAS, Dr. Cummings was honored and beloved by the citizens of the community, and by his fellow practitioners, and his sudden passing is an irreparable loss to all of us; and,

WHEREAS, it is the desire of the Pontotoc-Murray County Medical Society to memorialize Dr. Cummings, and to extend to the members of his family its deep and heartfelt sympathy in their loss and bereavement:

NOW, THEREFORE, BE IT RESOLVED that the Pontotoc-Murray County Medical Society does hereby formally recognize the long years of service rendered by Isham L. Cummings, M.D., to the people of Ada, Oklahoma, and its surrounding territory; his friendly and cheerful association with his fellow practitioners; and his many contributions to the welfare of his community.

That the members of the medical society do hereby express to Mrs. Cummings, their children, and to all members of the family, their deep and sincere sympathy in their bereavement.

That a copy of this resolution be forwarded to the members of Dr. Cummings' immediate family, and that another copy be delivered to the Oklahoma State Medical Association.

William T. Gill, M.D., *President*
Ollie McBride, M.D., *Secretary*

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Periods of anorexia following infectious disease and surgery can readily produce a series of consequences detrimental to the patient: (a) curtailed food consumption, (b) further deterioration of the nutritional state, and (c) impeded recovery.

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both a dietary and a therapeutic worth.

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PROTEIN	32.1 Gm.	VITAMIN B ₁	1.16 mg.
FAT	31.5 Gm.	RIBOFLAVIN	2.00 mg.
CARBOHYDRATE	64.8 Gm.	NIACIN	6.8 mg.
CALCIUM	1.12 Gm.	VITAMIN C	30.0 mg.
PHOSPHORUS	0.94 Gm.	VITAMIN D	417 I.U.
IRON	12.0 mg.	COPPER	0.50 mg.

*Based on average reported values for milk.

BOOK REVIEWS

TWENTIETH CENTURY SPEECH AND VOICE CORRECTION. Emil Froeschels, M.D., Philadelphia, Philosophical Library.

This book sets forth current thinking in the fields designated by the title, and is a well integrated volume composed of 22 monographs by 19 contributors.

Following an introductory review of the anatomy and physiology of the organs of speech, the authors turn to hearing as necessary to normal development of speech. The corrective and educational methods of approach to defective hearing are then outlined in detail, and the importance of early training for the deaf, or partly deaf child, is emphasized. Sources, causes, and useful corrective measures to all common speech disturbances are then discussed.

Of particular interest to the physician are the educational methods and stimuli employed to help the organic aphasic to minimize his speech loss. Stuttering and cluttering of speech are attributed to purely psychogenic sources and the various organic theories, including the shifting of handedness, are discounted as a group and disproven in several related instances. Psychotherapy, coupled with retraining techniques, are employed to correct these disorders. According to the authors, long and protracted analyses of the Freudian type are not as effective in therapy as are more brief and pointed psychotherapeutic procedures. Rhinolalia, or nasality of speech, merits careful consideration and the relative importance and treatment of both undesirable degrees of twang and flatness of tone are the subject of one entire chapter.

While of some interest to the doctor as a reference source, the volume is of primary value to the teacher of speech and hearing classes.—Moorman P. Prosser, M.D.

EATING FOR HEALTH. Pearl Lewis, 121 pages. Price \$2.25. The MacMillan Company. 1948.

This attractively illustrated little book for the layman summarizes concisely the essentials of the what, when, why, how, and how much of eating. Couched in scientific, though increasingly familiar terms, it is a book every practicing physician will find useful in directing the feeding of his patients.

Thirteen daily dietary plans, with accompanying menu suggestions, provide specific directions in feeding both sexes and all ages from one onward, not omitting special consideration for the pregnant and lactating women and heavier men. With these and the sixth and last chapters, the major nutritional problems of the housewife are solved. This last chapter gives specific directions on when to buy, how to select, how to prepare and serve meats, dairy products, fruits and vegetables. Of special interest is the division devoted to the proper cookery of the variety (organ) meats.

One hesitates to make such a long review of so short a book but mention must be made of the excellent index; the height-weight-age chart; the tables classifying foods as to their relative merits in terms of protein, fat carbohydrate, and vitamins and the author's superior condensation of human physiology which convincingly explains the importance of food.

With the now available texts on treatment by diet for personal reference and this little book for the guidance of the patients, the medical profession could soon cut the ground from under the food faddists and those who

would profit at the expense of the uninformed.—Lucile Spire Blachly, M.D.

CHILDREN OF THE PEOPLE, THE NAVAHO INDIAN AND HIS DEVELOPMENT. Dorothy Leighton, M.D., and Clyde Kluckhahn, Ph.D. Harvard University Press, Cambridge, Mass., 1948.

This well-indexed, effectively illustrated volume of 275 pages represents a difficult but interesting study in human development. It is the result of a joint undertaking by the University of Chicago and the United States Office of Indian Affairs. The frontispiece presenting the fine faces of a family group framed in the front bow of a delapidated covered wagon against the background of its dark interior, suggests all the mystery of a tardy evolution and the difficult problems imposed upon a carefree primitive race by the white man's civilization. The objectives as stated in the preface emphasize this statement. The authors set themselves the task of investigating and analyzing the development of personality in the Indian as compared to the whites. In the ultimate it is the purpose of this and similar tribal studies to evaluate the effects of the Indian service upon individual personality, upon the family, the clan and the tribe. All this with the hope of discovering facts, traits and trends upon which to base administrative policies.

The observations and the tests employed and the conclusions reached required experience, background and highly specialized skills in the fields of medicine, anthropology, psychology, education, linguistics and administration. In many instances it was necessary to have the services of an interpreter. In some it was impossible to secure cooperation in either English or Navaho; in others confidence and satisfactory response were obtained only after many skillfully negotiated visits in the home. As the reader follows the course of this study so well tabulated and reported by the authors he is impressed with the good and evil possibilities inherent in government policies and Indian agency administration. The study seems significant in that it reveals evidence of past administrative errors and points up the possibility of future administrative difficulties. To the serious reader possessing a reasonable knowledge of human nature and racial development the prospect is not very promising.

The record indicates that arbitrary rules and regulations may retard progress toward the white man's way of life.

The necessary methods of approach and the reluctant response to our past efforts reflect our meager reward. A close scrutiny of this study causes the reader to wonder if the Office of Indian Affairs ever had the least conception of what it might take to make a good U.S. citizen out of a good Indian. It has required many generations to bring about the Navaho's present adaptation to the soil, the horse, the sheep and the goat, and the "know-how" which enables him to live in a fair degree of nutrition on less than a \$100 per capita annual income. If the Navaho way of life could suddenly be transformed to the white man's way, great economic adjustments would be necessary. Such requirements cannot be met by the semi-arid land now occupied by the Navaho.

The facts and opinions contained in this volume should be of great assistance to the Office of Indian Affairs and the various agencies now dealing with the Indians.—Lewis J. Moorman, M.D.

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MEDICAL ABSTRACTS

TESTING SPEECH-HEARING AND THE EFFICIENCY OF HEARING AIDS. Douglas MacFarlan. *Annals of Otolaryngology, Rhinology and Laryngology*. St. Louis. 57: 444-452 (June) 1948.

The speech-hearing test is still the best test of the efficiency of human hearing. With an audiometer one has to compute the possible hearing loss to speech. The instrument needed for modern speech-hearing testing is a phonograph with a motor-driven turntable and a crystal pick-up. The speech is sent out either over a headphone or over a loud speaker. The record is one on which numbers are recorded on one side and monosyllabic words on the other.

In testing the individual ears the patient is merely directed to repeat the word he hears. The loudness of the speech is started at a point easily audible and is diminished to the threshold of hearing. The reference point for speech testing is 1000 cycles. This can also be correlated with audiometer decibel level.

In speech-hearing testing, numbers are reported at thresholds of 10 decibels lower than other monosyllabic words. Thresholds are as sharp as with frequency audiometry. Very sharp thresholds are seen in those with nerve deafness, less sharp thresholds in those with catarrhal deafness.

No other test shows up auditory inattention better than the speech test. In individuals with senile deafness and in those with profound deafness of long standing, inattention usually develops, i.e., the speech has to be loud first before the patient begins to hear speech of lower intensity. In such cases the training of attention can much improve the hearing of the patient.

In the reporting of words other than numbers one will find that the vowel sounds are usually heard correctly. It is in the proper hearing of consonants that mistakes are made. Sentences are not used as testing stimuli in order to exclude familiarity and associations from the hearing test. On the other hand, meaningless sounds are not used either because they are difficult to recognize and to report.

One should test and record not only the threshold but the convenient loudness level which is normally about 40 decibels above threshold. The pain threshold should also be investigated. When it is near the auditory threshold the patient will hesitate to accept a hearing aid with the needed amplification.

In nerve deafness the efficiency rating does not improve above a certain loudness level while in catarrhal deafness efficiency increases with loudness up to the pain threshold. In testing the relative efficiency of hearing aids, the loudspeaker is used and the patient is placed at a fixed distance from the instrument.

In prescribing a hearing aid the otologist should start out with giving the addresses of several retailers selling accepted aids. The patient should try the various aids and he should bring in to the office of the otologist those which seem to him to be most satisfactory. The otologist should merely act as a disinterested third party in selecting, by reliable test, the best hearing aid for the patient.—Marvin D. Henley, M.D.

UNTERSUCHUNGEN UBER WITTERUNGSEINFLUSSE AUF DIE NICHT AKUTEN GLAUKOMFORMEN (Study of the Influence of Weather Upon the Non-Acute Forms of Glaucoma). F. Knecht. *Ophthalmologica*. Basel, 116:21-38 (July) 1948.

The effect of weather upon human mind and body is

well-known. While normal physiological functions are not unfavorably influenced, certain sick persons respond to the variations of weather with an acute exacerbation of their sufferings. Such diseases are called meteorotrope, and the pathological phenomenon is termed *meteorotropy*.

Weather is composed of many factors such as temperature, humidity, barometric pressure, force of wind, direction of wind, precipitation, etc., but none was able to select any one of these single factors as the chief cause of meteorotropy of diseases. Indeed, it is the entire complex of weather factors which decides how a sick body will respond to it. Such complexes are best represented by the *weather fronts*; they are the border lines at which air masses of different origin (arctic, polar, subtropical, tropical, etc.) meet.

Meteorotropy of a disease is proved by the increased frequency of its attacks during a particular type of weather. There are many meteorotrope diseases. In ophthalmology, the behavior of glaucoma shows changes with the weather. The correlation of weather and glaucoma was first studied by Steindorff in 1902. Since then many more studies had been carried out, especially on the effect of weather upon acute glaucoma attacks.

These studies showed that the acute glaucomatous attack is more frequent in the cold than in the warm seasons of the year. It became also evident that the largest number of acute glaucomatous attacks occurred at the time when a weather front was passing through the region. The present author began to study the effect of weather upon non-acute forms of glaucoma (glaucoma simplex, chronicum, secundarium). He was especially interested to see whether there is any variation of eye tension coincident with the weather fronts.

He found that most of the cases of inflammatory glaucoma occurred in January, and the lowest number in August. This coincides with the winter maximum and summer minimum of acute glaucoma attacks. A study of the statistics of the last decade showed that 1939 and 1945, i.e., the first and last year of the World War, produced the greatest number of non-acute glaucoma patients. Whether there is a five-year periodicity in the ebb and tide of glaucoma cases is still not known.

Study of the weather charts and glaucoma statistics showed that there is a certain regularity over a country. The increase in eye tension was 10 mm. Hg. or over under such weather conditions in 10 per cent of chronic glaucoma, eight per cent of simple glaucoma, and five per cent of secondary glaucoma.—Marvin D. Henley, M.D.

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Choctaw-McCurtain- Pushmataha.....		Fred D. Switzer, Hugo	
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Harmon.....	R. H. Lynch, Hollis	C. N. Talley, Hollis	First Wednesday
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Hughes.....	L. A. S. Johnston, Holdenville	Paul Kernek, Holdenville	First Friday
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THE JOURNAL

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OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

THE ADMINISTRATION'S TEN YEAR PRESCRIPTION

All members of the Oklahoma State Medical Association would do well to read the Truman inspired and Truman approved ten-year health program prepared by Oscar Ewing, Federal Security Administrator. Furthermore, it is recommended that after a short breathing spell for cogitation, *War, Politics and Insanity* by the English psychiatrist C. S. Bluemel¹ be carefully perused and digested. Wading through the glowing promises of the Truman-Ewing prescription and the hazards of a vulnerable democracy dominated by supercharged politicians of the obsessive-compulsive type as depicted by Bluemel is not a refreshing adventure. On the contrary it engenders a sense of fear and in the mind of the red blooded American, it results in a firm determination to hold fast his remaining personal liberties. Whether the obsessive-compulsive politician is a misguided, conscientious crusader or a designing power-crazed dictator or bureaucrat, trying to butter his bread, makes little difference.

In either case the people stand to lose unless they experience an enlightened awakening, become militant in self defense, and carry the fight to Washington in sufficient strength to change the political psychology before all is lost.

The preposterous fiasco the American people are now facing in the field of medicine is most embarrassing. This is particularly true when the intelligence of the American people and the traditional principles of democratic government are taken into account.

The dominance of Great Britain's socialistic government over medicine already affords an outstanding example of the hazards of government control. Under medicine as a free enterprise the British people enjoyed the protection which vaccination against small pox, vouchsafed by the gift of their great Edward Jenner. But having lost their personal freedom because of an authoritarian government, the entire population, os-

tensibly under a liberal policy is freed from the necessity of being vaccinated. How can the administration of the National Health Service Act justify such a sweeping change with such catastrophic possibilities.

Shall we empower our own Federal Security Administrator with the authority to do such dangerous things to the citizenry of the United States? An editorial in the New England Medical Journal of September 2 after discussing the plight of the English people under this ridiculous ruling says, "England, in this respect, may now be compared to a city that abandons fireproof building construction because of its fire-fighting equipment that should, under normal conditions, hold in check those conflagrations that are likely to occur."

It seems fitting to supplement this inadequate discussion, intended only as a stimulus and a warning with the following pertinent statements. A letter reproduced in the British Medical Journal of August 21, 1948,² under the title "Head Hunters" illustrates the baneful influence of the British National Health scheme.

"Sir,—In his letter on "Reduced Incomes" (*Supplement*, July 17, p. 48) Dr. C. J. Gordon Taylor makes a true but very sad statement that the only way to make a living is to take on patients by the thousand. The Minister pays according to the number of heads on the doctor's list. In other words, we must become head-hunters.

"Those G. P.'s (general practitioners) who have always set themselves a high standard in their everyday work and have taken pride in doing the best for their patients will thus find their incomes reduced. The alternative is to debase these standards, take on large numbers, and do what they know to be poor work under sweated-labor conditions. These sweated-labor conditions turn out in actuality to be a test of physical endurance. They make no allowance for the not-so-young doctor, nor for those of exceptional experience and capability. The future is indeed grim, except for the head-hunters. The complacent pomposity of the B.M.A. in saying doctors

must make the Service a success is infuriating; because the better the doctors do their work the worse their pay."

This additional letter from the British Medical Journal of August 28 under the title "Free Bottles" reveals another of the many ridiculous aspects of the British plan.

"Sir,—Under the National Health Scheme bottles and containers are supplied free. The chemist is paid 2½d. a bottle. Suppose the average number of bottles prescribed per doctor per day for six days a week is twenty, and if 30,000 doctors join the Service, then the annual cost is 1,950,000 pounds. The weekly reward to a doctor for his services per patient is only slightly more than the cost of an empty medicine bottle. Perhaps later on kind Mr. Bevan might award us an addition to our pay equal to the cost of one more empty bottle a week?—I am, etc., T. A. Weston."

The following over-all viewpoint from Cyril Osborne, conservative member of Parliament, is significant in that it shows the idle complacency of the socialite rule.³ He urges Britons to "Cease this mad chase after pleasure and get down to work."

After warning that otherwise they may go hungry soon, he adds, "Last year this country did not earn its bread, cereals, meat or bacon and we ate these basic foods as charity from the American workers and taxpayers. This charity will dry up as soon as Stalin becomes friendly and war with Russia less likely."

After discussing the shocking conditions in New Zealand the following estimate for the U. S. is given in this brief statement:⁴

"Dr. E. L. Henderson of Louisville, who returned not long ago from his third European trip in 14 months as a representative of U. S. medical groups, reported that socialized medicine has resulted in a marked decline in standards or medical care. He said that if members of Congress could see how these systems work, they would resist any effort to impose compulsory health systems on the United States.

"Dr. A. L. Jones, an oral surgeon of Christchurch, New Zealand, gave even more recent testimony to the same effect in an address to a Chicago conference of professional men sponsored by the National Physicians Committee.

"... Based on this experience, the United States, with a similar system, probably would have to provide facilities for some 17,000,000 individuals as a permanent hospital population."

The A.M.A. report on hospital service in the United States shows a total bed capacity for the citizenry of the United States today as 1,425,222. Multiplying this figure by 12 gives approximately 17,000,000. Multiplying this by the present per diem cost of V.A. hospitalization gives an approximate cost of 32 billion. Add to this figure on hospitalization two or three times the cost of present medical service as given at present and a stupendous figure emerges. Look at it and despair.

There is not a genuine need for so many beds. The New Zealand experience shows they must be provided to meet the false demand created by a vicious paternalism. People are so constituted that when they give up their money with no hope of returns except through sickness, many of them find it easy to fall ill. Though it may be difficult to find a doctor who will agree, it is easy to go from one to another since the service is provided by the government and nobody but God and the doctor knows they are not sick and nobody but the patient and God knows how many doctors he has seen. At the cost of honor and integrity certification may be achieved and before the deadline is reached the hospital bed is occupied and the spurious patient is recovering his money's worth through a well attended bed rest. A government inspired distortion of conscience makes this subterfuge seem justifiable and brings a regrettable sense of false satisfaction.

Recently the 20th century king and queen trotted to Parliament to give it the swiftest opening ever recorded. The time saved will be needed to work out the wild dreams of a socialistic government and to negotiate its economy under the curtailed production of its soldiering labor organizations. It takes money to successfully lower educational standards and achievement by subsidizing all who enter Oxford and other similar schools. What will be the result of the leveling process; who will arise from the low intellectual plateau to lead the empire? If such a possible leader should arise would the representatives of socialism knock him down to the drab level which knows no peaks. Amiel foresaw this a hundred years ago and sounded the alarm. America, literally the land of the free, should listen and learn.

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2. Humphrey Foxell, "Head Hunters," *British Medical Journal* (August 21) 1948, p. 90.

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SCIENTIFIC ARTICLES

BASIC PRE AND POST-OPERATIVE TREATMENT FOR CANCER OF THE COLON*

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More and more physicians have come to realize that the only hope of curing malignancy of the bowel is by radical operative excision of the lesion and of the gland-bearing tissues in continuity with the lymphatics of the involved area. Any operation of this nature must be radical to be successful; and if it is to be radical the patient must be adequately prepared to withstand it.

Any operation for cancer of the colon or rectum is an operation of the first magnitude even when the patient is in good physical condition. Unfortunately the patient who has cancer of the colon also is often the victim of a train of complications due to the lesion itself. The best way to treat complications of surgery of the large bowel is to forestall them, and it is with this thought in mind that the following notes are offered.

The six critical factors are: waterbalance, acid-base balance, nitrogen balance, anemia, anti-bacterial control and vitamin balance. There is no order of importance implied in this list; in fact most of these factors merge one into the other and are divided arbitrarily for the purpose of convenience in discussing them. Thus, even the strictest attention being given to any five of them, neglect of the sixth may be just as catastrophic as if all had been ignored. Vigilant control of all six will assure operability to the vast majority of patients and will offer at least a fighting chance for survival to that small group of patients who under other circumstances are doomed to certain death.

I. WATER-BALANCE

Pre-operative: During this phase waterbalance is usually near equilibrium although the advanced case whose food intake has been poor and who has lost considerable weight demands careful consideration as to the water requirements of his tissues. The important factor to be determined is the ability of the kidneys to maintain their function adequately following the strain of extensive surgery. At least 500 cc. of urine

are required daily for *normal* kidneys to concentrate to a specific gravity of 1.030. To excrete the same amount of waste solids kidneys of low concentrating capacity require at least 1500 cc. This has been established by Maddock and Coller³ to be the *minimal* quantity of daily urine output. There have been attempts to provide simple inexpensive clinical tests to determine the status of water balance. Notable among these has been the McClure-Aldrich test of tissue hydration^{4,5}. More reliable criteria for evaluating the functional state of the kidneys are the serial urea clearance determinations⁶ and blood NPN or urea-nitrogen. A word of warning here—many physicians consider renal function to be normal if the blood NPN is reported within normal limits. This value becomes elevated only after complete break down of kidney reserve⁷. A urinary output of 1500 cc with a specific gravity of 1.015 or above, can usually be maintained by an intake of 3000 to 3500 cc daily by mouth. The nature of the fluid is controlled by the desires of the patient. An intake and output chart should be initiated at this time.

Post-Operative: The intake--output chart is continued and the nursing staff must be impressed with the importance of an accurate, and *complete* record. A frequent error is to fail to include the amount of fluid drained by Wangenstein suction if that apparatus is being used. A total intake of from 2000 to 3000 cc. or more is given daily. If an insufficient amount of sodium chloride is given with this fluid a diuresis may follow and unless the electrolyte is replaced the patient will become markedly dehydrated in a few days despite the large fluid intake. Factors other than the output chart, in determining the volume to be given are comparison between post-operative and pre-operative blood studies, gastro-intestinal drainage, and urine concentration. The nature of the fluid to be administered is de-

terminated by study of other factors as will be outlined later.

II. ACID-BASE BALANCE

Pre-Operative: For all practical purposes the keystone of acid-base balance is sodium chloride metabolism. While under normal circumstances the chloride level remains fairly constant, in patients who suffer chronic debilitating disease, such as carcinoma of the colon, and particularly if the lesion is of an obstructive nature, any marked degree of loss in the extra-cellular level of base and water results in a fall of the total base concentration both in the plasma and within the cell itself. Approximately 90 per cent of the base in the extracellular fluid is composed of the sodium ion. In order to avoid either acidosis or alkalosis, the chloride level and total serum carbon dioxide content must be known. In addition the hematocrit level should be determined simultaneously. No surgery is permissible until the chloride level, and synchronously, the carbon dioxide combining power of the serum has been brought to within normal limits. It is preferable to permit this normal level to become stabilized for two to three days before surgery in elective cases. Isotonic saline with 5 per cent glucose is the usual choice of replacement fluid, but for emergency use, particularly in the case of the obstructed alkalotic individual, hypertonic saline solutions, up to the level of 5 per cent may be of life-saving importance. In the presence of hypo-proteinemia, however, such solutions should be preceded by large infusions of plasma or whole blood to avoid the hazard of an acute pulmonary edema. It has been suggested that three fourths of the total base required be administered as isotonic saline solution and the remainder in the form of sodium lactate⁸. If drainage through the indwelling intestinal tube is being used additional saline must be provided to allow for such electrolyte loss. Wangenstein has suggested as a good working rule to estimate the sodium chloride loss as five grams per liter of gastric fluid aspirated. No rule or formula for estimating the quantities of chloride needed can be consistently relied upon. There is no substitute for often repeated chloride and carbon dioxide combining power determinations.

Post-Operative: It is during this phase that the electrolyte status of the patient is most difficult to maintain. He has had a prolonged anesthesia, which has been shown to cause a certain degree of salt intolerance,

and he may be subjected to electrolyte loss by way of duodenal suction and peritoneal drainage in addition to his normal losses due to perspiration and urination. It is imperative to replace lost electrolytes promptly if alkalosis is to be avoided. Here again so-called "routine I. V.'s" cannot safely bridge the gap. The blood chloride level and the carbon dioxide combining power must be determined daily—and quantitative and qualitative intravenous medications must be computed accordingly. In the presence of hypo-proteinemia, oliguria or acidosis, particularly after general anesthesia, isotonic sodium chloride must be given with some caution to avoid the risk of pulmonary edema. Coller has suggested that hypotonic sodium chloride (0.5 per cent in 5.0 per cent glucose) be given during the first two post-operative days.

III. NITROGEN BALANCE

Pre-Operative: For many years it has been known that in malignancy there is a decreased protein level. Numerous causes for the low serum protein levels in patients with carcinoma of the gastro-intestinal tract have been suggested. Among these are functional impairment of the liver⁹, continual or intermittent bleeding¹⁰, depletion of protein stores due to deficient diet¹¹, inability to absorb adequate amounts of the essential amino acids¹⁰ and failure of adequate serum protein synthesis¹². 29.3 per cent of Mayer and Kozolls patient with gastro-intestinal cancer had average protein values below 6.0 Grams per 100 cc. Bacon *et al* report 29.7 per cent of their patients with colonic cancer showed varying degrees of hypo-proteinemia upon admission to the hospital¹³. A routine pre-operative plasma protein test must be taken. Hypo-proteinemia is present if the protein level is at or below 6.5 Grams per cent. Higher levels are desirable.

The best route for protein administration is by oral food intake² but often the cancer patient is unable to either ingest or assimilate an adequate amount of proteins. Parenteral administration of blood plasma, and plasma substitutes, then becomes necessary to bring the nitrogen balance up to normal and hold it there. Prior to the recent war whole blood was the usual means by which protein was served to the organism and it still occupies a pre-eminent status in correcting hypo-proteinemia although plasma and hydrolyzed protein have been winning a place for themselves due to the experience gained in their use by the military. Elman¹⁴, points out that "the thera-

peutic value of blood transfusions resides largely in their protein content which, of course, occurs in at least two forms: (1) as hemoglobin within the red blood cells, and (2) as the various plasma protein fractions, particularly albumin." Allen *et al*¹⁵ believe that the fear of over-transfusion is unwarranted except in the presence of a diminished cardiovascular reserve. In support of this contention they cite the example of a patient who was given 7,200 cc. of whole blood in 11 days. Despite a draining subdiaphragmatic abscess he was in positive nitrogen balance continuously. An unexpected finding in this particular case was that there was no appreciable increase in total circulating blood or in plasma protein concentration during the first 6 days during which the patient received 5200 cc. of blood. During this same time the patient's blood volume failed to show any appreciable change from the initial pre-transfusion level. They postulate that possibly some of this blood was held extravascularly as tissue protein. They state that "the term "hypoproteinemia" probably should not be limited to lowered plasma proteins, but should apply to deficits in hemoglobin as well," since, as they point out, hemoglobin constitutes approximately two-thirds of the blood protein, and a markedly reduced whole blood protein level can be present in an individual with a normal plasma protein if he is markedly anemic.

The value of plasma is disputed by some workers¹⁶, however this belief is probably due to the fact that most of those surgeons who decry the use of plasma have administered it in quantities too small to cause any appreciable elevation in the plasma protein concentration. If plasma is used it must be given in large quantities, 1500 cubic centimeters, or more, daily, for several days. The author has administered to severely hypoproteinemic soldier patients, as much as 4400 cubic centimeters in 24 hours using the Scannell apparatus, and with a good plasma protein response. Holman, Mahoney and Wipple¹⁷ were able to maintain a positive nitrogen balance, in dogs on a nitrogen-free diet, by intravenous administration of plasma.

In recent years there have been developed preparations of amino acid solutions and hydrolyzed or digested proteins suitable for parenteral use. These solutions are adjusted and fortified to yield all of the essential amino acids necessary for normal protein synthesis. They are relatively in-

expensive and it has been demonstrated by numerous workers that humans and animals can be maintained in positive nitrogen balance by administration of these synthetics as the sole source of nitrogen (¹⁸⁻¹⁹⁻²⁰⁻²¹). Glucose solution should be given with the protein infusions because the addition of carbohydrate to the amino acid mixture spares the protein and permits more of it to be used by the body for tissue protein synthesis. Fifteen to 20 grams of protein hydrolysate per hour is a satisfactory rate of administration for the average patient. From 60 to 90 grams in 24 hours is required to maintain positive nitrogen balance. Administration of these preparations is guided by the same indications and precautions as for normal plasma, keeping in mind that harmful reactions have occurred following the parenteral administration of these proteins just as they have following injections of plasma.

About 5 per cent of patients react to the intravenous administration of amino acid preparations. These reactions are; nausea, abdominal cramping, sudden elevation of the temperature, and urticarial rashes. The frequency of these reactions can be held to a minimum by adjusting the speed of infusion to no more than perhaps 300 cc. per hour, or by simultaneously injecting 5 per cent glucose solution through the same needle. If it is anticipated that amino acids will be given over long periods of time the most distal veins should be used first because phlebothrombosis at the site of injection very frequently follows prolonged administration. Later injections may be given at successively proximal points in the same vein.

Post-Operative: Parenteral protein administration assumes even greater importance here than it did prior to operation. Often the patient is unable, or is not permitted to ingest and assimilate protein by mouth, consequently he suffers a rapid loss of plasma protein. The systemic effect of this loss is a reduction in blood volume and as a result, the venous return is lessened, the cardiac output is reduced and shock supervenes. A less immediate result is delayed and abnormal wound healing jeopardizing the anastomosis of the bowel. Koster and Shapiro²² and others^{23 24} have shown that hypoproteinemia is a predominant factor in the faulty wound healing that eventuates in disruption.

The same general principles should be followed post-operatively as were prior to

surgery. The indices are daily protein and hematocrit levels. The plasma protein level alone is not reliable unless an index of plasma volume also is available. The one other point to be kept in mind is that *neither plasma nor amino acid solutions are more than temporary and partial substitutes for whole blood replacement in shock due to blood loss.*

IV. ANEMIA

Pre-operative: As is well known, one of the most constant laboratory findings in cancer of the colon is anemia; often it is the only symptom in carcinoma of the right colon. Gross²⁵ has observed a direct destruction of erythrocytes by specific hemolysins formed, or liberated, by cancer cells of that species. He concludes that strain-specific carcinoma hemolysins are at least a partial explanation of the frequent development of anemia in patients with cancer. No patient should be required to undergo major definitive colon surgery unless his blood count is at the level of 4,500,000 RBC per cubic mm., or higher, irrespective of the number of blood transfusions necessary to bring it up to this level. An additional liter of whole blood should be available for administration during, and just following the operation.

Post-operative: During the immediate post-operative phase the blood pressure is the index of blood transfusion, rather than the blood count. Blood should be liberally administered during the first 24 hours for a two-fold purpose, (1) to combat shock, and (2) to provide protein, each 500 cubic centimeters of whole blood providing about 19 grams of utilizable protein. After the first post-operative day blood is seldom needed if it has been adequately administered previously.

V. ANTI-BACTERIAL CONTROL

Pemberton, Black and Maino, of the Mayo Clinic, have stated²⁶ that the improvement in the results of colon surgery since the introduction of sulfonamides, streptomycin and penicillin, is as striking as the changes produced by the use of iodine in the surgery of the thyroid gland. Before the introduction of chemotherapy in their clinic the mortality following colostomy was 5.1 per cent. Since routine chemotherapy was adopted in 1942 the mortality from colostomy has dropped to 1.1 per cent. This experience has been amply confirmed by many others^{27 28 29 30 31 32 33}.

Poth and his associates have shown that succinyl - sulfathiazole (Sulfasuxidine) is

sparingly absorbed from the bowel; the blood level of free sulfathiazole rarely going above 1.5 milligrams per cent in patients taking the suggested dose of .25 grams per kilogram of weight in six divided doses per 24 hours. Pthalylsulfathiazole (Sulfathalidine) has the same characteristic. The latter drug is twice as potent as the former so is usually given in amounts of 0.1 gram per kilogram of body weight every four hours. Either drug must be begun at least seven days pre-operatively. Poth, Ross and Fernandez³⁴, working on dogs showed that when sulfathalidine had been given before and after laparotomy, the inflammation resulting from spillage of intestinal fluid in open anastomosis subsides and normal tissue healing progresses. No dog died when the drug was used; 43 per cent of their controls succumbed.

As a group, the sulfonamides are believed to produce their characteristic effects on bacteria by interfering with their metabolism in the so-called "logarithmic" or most rapid phase of bacterial growth. O'Meara *et al*³⁵ have shown that this action within the bacterial cells is by a neutralizing combination of the sulfones with gluco-reductone. This substance is a source of cell growth energy. Sulfonamides, by combining with gluco-reductone deny it to the bacterial cell and the entire cellular mechanism is suddenly stopped at the very point where it has become developed for the purpose of reproduction.

Poth³⁶ and Angelo³³ list the advantages of sulfathalidine as: (1) A more rapid action on *E. coli* and the vegetative forms of clostridia; (2) It does not cause watery stools; (3) It is effective in the presence of diarrhea; (4) It is non-toxic; (5) It is twice as potent as sulfasuxidine.

The tendency for sulfasuxidine to cause thin stools can occasionally be used to great advantage in the preparation for surgery of the patient with a partial obstruction of the bowel. Frequently it will be found that the obstruction will be almost completely relieved due to the liquifaction of the feces and the subsidence of the edema due to secondary bacterial invasion of the tumor mass.

Aside from occasional minor drug sensitivities the most important deleterious effect of the sulfonamides is that they diminish the naturally occurring vitamins by lessening the bacterial action which produces them. This factor will be more fully discussed in a following section.

Streptomycin has a potent action on many gram-negative as well as gram-positive bacteria³¹⁻³⁷. Among these is streptococcus fecalis which is ordinarily resistant to other drugs. Escherichia coli and the paracolon bacilli are also sensitive to this drug. Streptomycin provides a high concentration in the intestinal tract, if given orally, because there is no destruction of the drug, hence it is almost completely excreted in the feces. It is tasteless and odorless so may be given dissolved in water in doses of one gram every eight hours beginning on the second or third pre-operative day. E. coli develops a tolerance to streptomycin in three or four days so prolonged administration is not advisable. Crowley *et al*³⁸ have found, in the case of urinary tract infections at least, that combined streptomycin-sulfasuxidine therapy is such more efficacious against resistant coliform bacteria than is either of the drugs when used alone. Serious toxic effects are rarely encountered. The most frequent reactions are headache, skin rashes or urticaria, fever, facial anesthesia and joint pains. These reactions are usually mild and disappear promptly following cessation of use of the drug. Involvement of the vestibular portion of the eighth nerve is not to be feared because of the route of administration and the limited amount of drug used.

Penicillin has no effect on gram-negative organisms, with the exception of the neisseria group. It is usually given in amounts of 25 to 50 thousand units every three hours intramuscularly. Dixon, of the Mayo Clinic, routinely dusts into the peritoneal cavity a powder consisting of 100,000 units of dry penicillin mixed with 10 grams of sterile sulfathiazole³⁹.

Poth⁴⁵ and his colleagues at the University of Texas discovered that there is an *antagonism* of action between penicillin and sulfathalidine. They found that when these two drugs were given at the same time the gram positive organisms were *not* affected and furthermore that the coliform organisms *increased* rapidly. They conclude that penicillin and sulfathalidine should not be given simultaneously.

Post-operative: As soon as the patient is able to retain fluids the calculated dosages of sulfathalidine should be resumed, being administered in a suspension with water or milk. If sulfasuxidine had been used prior to surgery it may be replaced by sulfathalidine for the reasons which have been previously listed. Administration of the

drug should be continued for eight to 10 days until sealing off of the line of anastomosis is complete.

Streptomycin and penicillin, if desired, can be continued, but because E. coli rapidly becomes resistant to the former drug it should be discontinued after three or four days.

VI. VITAMIN BALANCE

Pre-operative: It is well accepted now that there is a high incidence of hypovitaminosis in patients who have cancer. This alteration in vitamin metabolism parallels the changes in nitrogen metabolism but the cause for the deficiency is not understood. Keifer believes that the vitamin B complex is perhaps the key factor. He says⁴⁰ "Vitamin deficiencies, particularly those involving the vitamin B complex group of vitamins can profoundly impair digestion and absorption of essential food elements. Since malabsorption further diminishes the subject's vitamin intake, a vicious circle is established." Golden⁴¹⁻⁴² has suggested that the intramural nervous system is the most probable medium through which nutritional deficiency affects the intestinal tract. Torda and Wolff⁴³ have demonstrated that when cholinergic nerves are stimulated they liberate both acetylcholine and thiamine and that the latter increases the effect of acetylcholine on the intestine and circulatory apparatus of the cat. Chemically these two compounds are closely related, therefore it is reasonable to believe that they may have a synergistic function. These facts furnish a reasonable explanation of the mechanism of paralytic ileus in the presence of thiamine deficiency and of the favorable response to administration of large doses of thiamine chloride. Leithauser⁴⁴ reported a series of cases of adynamic ileus with marked abdominal distention, which failed to respond to mechanical decompression and drugs, but which were promptly cured by administration of the vitamin B complex. He states "It is now my practice to administer parenterally vitamin B complex, with high thiamine content to all surgical patients the day before operation, and daily for three days after surgery. Since this has been done, post-operative distention has been almost entirely eliminated." Ravdin and Zintel and a host of other writers confirm the need for supplemental vitamin intake. The principal needs are; ascorbic acid; thiamine, riboflavin, and nicotinamide of the B complex; and vitamin K. They may be given orally in the form of one of the

multivitamin preparations but to assure absorption the parenteral route is probably best. It is suggested that heavy dosage be given, for example .5 to one gram of ascorbic acid, from 10 to 30 mgm each of thiamine and riboflavin, from 200 to 300 mgm of nicotinamide, and five mgm of vitamin K be given daily beginning three or four days prior to operation. A convenient way to administer all of the above (except the vitamin K) is to add the entire contents of an ampule of Solu-B with vitamin C (Upjohn) to the glucose solution just prior to its administration.

Post-operative: Parenteral administration of vitamins should be continued in the amounts indicated above until the patient has begun to take a general diet. After this time he should receive any of the various multiple vitamin preparations orally three times daily throughout his convalescent period.

CONCLUSION

Revolutionary changes have been made in

the surgical management of colon cancer in the past 15 years. These have come about because of the advent of chemotherapeutics and because more careful consideration is given to the physiologic and chemical imbalances which are almost always present in patients with carcinoma of the large bowel. Careful individualized attention to these factors has resulted in a greatly increased operability rate (as high as 96 per cent being reported in one series of 250 cases.¹) and in greatly lowered mortality and morbidity rates.

The writer has attempted to stress the basic facts supporting each of the six major factors presented, and has deliberately avoided presentation of a "routine set of orders." Every cancer patient is an individual chemical and physiological problem. It can be only by the application of basic principles guided by adequate use of the proper laboratory studies that this patient will be assured of every possible chance of being cured. The least of us deserves nothing less than that.

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RINGWORM OF THE SCALP: TREATMENT BY X-RAY EPILATION*

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In the past few years an epidemic of ringworm of the scalp has occurred in widely separated parts of the United States, especially in the larger cities of the east and north and recent experiences suggest that the incidence of the disease in Oklahoma has increased rapidly. A disturbing feature of the epidemic has been the reported rise in the percentage of cases resistant to ordinary treatment measures. In these cases the disease does not respond to the usual simple remedies but continues for the most part unchecked until the hair is epilated with x-rays. Several instances of this sort seen recently have led me to think that tinea capitis of a more resistant type is invading Oklahoma and that treatment by x-ray epilation may become more necessary here than it has been in the past.

CAUSE

Ringworm of the scalp is caused by an invasion of the skin and hair, including the hair root, by any of several species of fungi. Two of these, *microsporum audouini* and *microsporum lanosum* have been reported as being most common in the United States. In times past, to judge from reports, infections with *microsporum lanosum* were more numerous than those caused by *microsporum audouini*, but in the epidemic of recent years this order has been reversed and it now appears that infection with *microsporum audouini* has become a good deal the more common of the two—in the experience of one group, accounting for 96 per cent of all cases. This is of importance, since experience indicates that treatment of infections with *microsporum audouini* is unsatisfactory except by x-ray epilation.

IMMUNITY

The disease occurs mainly in children of 10 or 11 years and younger, though a few cases occur up to puberty. I have never observed one in a grown person and extremely few have been reported. Evidently as puberty is approached an immunity to the

disease develops. It is interesting that although the adult scalp is immune, the bearded area is not, since ringworm of the beard is of occasional occurrence. Tinea capitis is seen about four times as often in boys as in girls but it is doubtful if this due to a true predilection. The difference in the incidence in the two sexes could be accounted for by the greater activity and consequently greater exposure of boys to the infection. As in other diseases there appears to be a difference in the immunity reactions in different patients. I recall an instance, observed several years ago, that seemed to be a good example of this. Two boys about eight years old were given the same type of treatment for ringworm of the scalp. These patients, who were dissimilar twins, lived together in the same house and in all probability had acquired the disease from the same source. One of them appeared to handle his infection without much difficulty—a few small abscesses cleared promptly under treatment and the patient was never ill. His brother on the other hand, had little resistance—the abscesses on his head were so large and numerous that the entire scalp appeared to have been lifted above the skull by the underlying pus. This was before the time of x-ray epilation and the patient was a very sick boy for months.

DIAGNOSIS

A trained observer usually can make the diagnosis of tinea capitis by inspection alone but at times it is necessary to resort to further procedure. A recent development is the use of the "Wood filter" for short ultraviolet rays. These rays cause the hairs of an infected area to fluoresce, reflecting a greenish light. Examination with the "Wood light" is quick and generally satisfactory but unless it is made under proper conditions confusion can arise from the fluorescence of drugs, ointments and other contaminants on the hair. For that reason the scalp must be carefully washed before any dependence can be placed on this type

*Presented at the Section on Medicine at the Annual Meeting of the Oklahoma State Medical Association, May 19, 1948.

of examination. A more positive diagnosis can be made by finding the fungus in the hair roots under the microscope, or by taking cultures, which are necessary in any case to differentiate the various microorganisms that cause the disease. Cultures are a valuable aid in treatment but if depended on as a guide, have the disadvantage of interposing a delay of four weeks required for their completion before treatment can be decided on. Clinically ringworm of the scalp can be confused with eczema, impetigo and alopecia areata. A demonstration of the fungus microscopically or by culture furnishes the only positive diagnosis.

SPREAD OF THE DISEASE

Ringworm of the scalp is acquired and spread by contact with contaminated material, especially hairs and epithelium, barbers' instruments, clothing, caps, pillows, furniture, combs, brushes and other things with which the patient comes into contact, such as sofas and theatre seats. Infection with *microsporum audouini* is essentially limited to man but *microsporum lanosum* affects animals as well. For that reason *microsporum lanosum* is often acquired from pets, mainly kittens and puppies and occasionally calves. Both of these types of organisms are transmitted directly from person to person.

TREATMENT

Treatment varies considerably with different persons and apparently with different fungi. It seems pretty well agreed that infection with *microsporum lanosum* is easily cured by topical applications, while that caused by *microsporum audouini* is very resistant to such measures. I am unable to say from personal experience whether this is uniformly true but at any rate, in years past most cases of ringworm of the scalp occurring in this region have been curable by simple means. In some cases, however, the time required for cure is so great that the treatment becomes a tedious thing for both patient and the person who does the treating. In such cases and in all infections caused by *microsporum audouini*, treatment by removing the scalp hair with x-rays is welcomed by all concerned, since in a great majority, this treatment results in cure within a few weeks after the hair falls. Of course, x-ray epilation must be carried out only by one having the necessary training and experience, for if improperly done, permanent alopecia may result. When it is properly carried out, however, this method can be quite safe, as indicated by

the experience in certain large centers in the east, especially New York, where thousands of consecutive cases have been treated in this way without a single instance of permanent alopecia resulting. I have myself used this method with complete satisfaction in selected cases for more than 15 years and in none has there been permanent loss of hair. In every case, cure of the ringworm has been effected within a short time after epilation.



Fig. 1. Showing the approximate location of the points on the scalp at which the beam of radiation is directed at the different exposures. The fifth point is above the ear on the opposite side of the head. Overlapping of the various treatment areas can be seen.

TECHNIC

Epilation can be carried out by various technics. In all of these the radiation is delivered to the scalp by directing the center of the beam to several points, allowing the radiation to overlap in varying degrees in the different areas treated. The method I have used and the one most commonly employed is one originally described by Adamson and Kienbock and called after these men. It consists in directing the beam of x-rays to five different points on the scalp, as shown in the diagram. It is advisable, though not necessary, to have the hair of the scalp clipped short before epilation in order to facilitate marking of the scalp and to increase the accuracy of the irradiation. The points at which the x-rays

are to be centered are most easily and accurately located with a "tinea marker," which can be made from a narrow flexible steel tape measure. Such a marker is made by forming a circular band 20 inches in circumference and attaching to it at right angles two semicircular bands, the ends of which are attached to the circular base band at a distance of five inches from each other. The semicircular bands cross at the top and are riveted in the midline, forming a helmet-like arrangement. This marker will not fit all heads exactly but will in any case serve



Fig. 2. The tinea marker in position on the head.

as a preliminary measuring device to fix a base point and furnish symmetry to the eventual marking of the scalp. The marker is fitted over the patient's head so that the point of intersection of the two cross pieces on top will rest approximately over the vertex of the skull, with the base band encircling the head near the margins of the scalp like a cap. The ends of the cross pieces of the marker then locate four other points on the scalp, the first one exactly in the midline, about an inch and a half behind the hair-line in front, another in the midline about two inches above the scalp margin on the occiput and two others, each about an inch above the ear on opposite sides of the head. The scalp is then marked with a skin pencil, making sure that the points are symmetrically located, exactly five inches apart and the marker is removed.

The details of irradiating the scalp for epilation can be obtained from any of several good text books dealing with the subject and I will not repeat them all here.

Several points are important however. Probably the most important of these is that the center of the beam of radiation must be directed exactly at each point marked on the scalp and at each exposure must be at right angles to that used in treating all other areas except the one directly opposite it on the skull. The child's head must be held perfectly still during the whole exposure, since any motion would cause an irregular overlapping of the irradiated areas, with possible permanent alopecia. The child may be a little excited and unruly at first but when he finds there is no pain or discomfort associated with the treatment, he will usually cooperate well. Another important consideration is the distance between the scalp and the target of the x-ray tube. The distance usually employed is eight inches and in general this is best but I have found in irradiating heads larger than average that a distance of $8\frac{3}{4}$ inches (making proper allowance for the effect of this increased distance in the dosage) will yield a more uniform epilation. During each exposure, the operator must be careful to shield the face and especially the ears, which might otherwise be subjected to an overdose from repeated exposures.

The dosage necessary to cause epilation by the method described will in most cases be close to 300r unfiltered, using 80kv but there is a considerable variation in the amount necessary in different patients. It goes without saying that the machine used must be accurately calibrated.

In most cases in which epilation is indicated it is best to epilate the entire scalp. When there is only a small patch of ringworm it is a temptation to epilate only the affected area. However, it is easy to overlook a small patch of ringworm elsewhere on the scalp and even when this is not done new patches may develop after epilation in other areas. If this happens it will be difficult or impossible to epilate the remainder of the scalp without giving the area originally treated a second dose and running the risk of permanent alopecia in this area.

SUBSEQUENT COURSE

After irradiation there is a latent period of between 15 and 21 days before the hair falls. In some cases at the end of 21 days the hair is loose but much of it will not fall out spontaneously. In cases of this sort the hair must be removed either with flat tipped tweezers or by covering the scalp with large pieces of adhesive tape, which are pressed against the scalp and left on for a short

time. When the adhesive is pulled off most of the hair comes with it and any remaining hairs are removed with the tweezers. Following epilation the scalp is treated with sulphur or ammoniated mercury ointment to destroy the fungus. A skull-cap made of an old sheet or handkerchief should be worn by the patients to prevent spread of the disease to others and the scalp should be washed with soap and water daily.

CONCLUSIONS

An epidemic of ringworm of the scalp, which has been spreading in the United States, has apparently reached Oklahoma in the past few years. There is an increasing incidence here, as elsewhere, of cases resistant to ordinary treatment measures. Such cases can be treated most effectively and satisfactorily by epilation of the scalp hair with x-rays.

PROTEIN METABOLISM AND THE USE OF AMINO ACID PREPARATIONS*

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Good nutrition is essential for health and nowhere is it more necessary than in those individuals needing to regain health. The maintenance of good nutrition requires the ingestion and utilization of sufficient amounts of the essential foodstuffs. These are roughly classified as: 1. proteins, 2. fats, 3. carbohydrates, 4. electrolytes or minerals, 5. vitamins, and 6. water.

Mor many years parenteral alimentation was limited to the use of glucose and electrolytes. With the development of protein hydrolysates, it became possible to administer this type of food to patients unable to take adequate amounts of food, and the importance of protein metabolism has become of paramount consideration.

PROTEINS AND AMINO ACIDS

Proteins are large molecules composed of many amino acids. These molecules are not constant or static, but are in a continual state of dynamic metabolic flux. Proteins after being taken into the digestive tract are hydrolyzed to amino acids which are absorbed and carried by the blood stream to all parts of the body. A resynthesis to protein takes place in which the amino acids are combined to form the type of protein particular to each organ and tissue. The liver performs an important part in this resynthesis and in preparing the proteins for the blood plasma.

The use of radioactive isotopes or tagged elements has shown experimentally that there is a constant interchange between the protein elements of various structures and that, depending upon the need, these ele-

ments may be shifted from one tissue or organ to another. Such interchange is going on continually among the plasma proteins, hemoglobin, the proteins of liver, body tissues, and general reserves.

The protein needs of an individual depend upon the amount of exercise or work, tissue repair, growth, age, body weight, and whether an individual is pregnant or is lactating. The daily requirement usually stated is one gram per kilogram of body weight, or one-third to one-half gram per pound. This amount of protein is a satisfactory minimum under normal conditions. In diseases, however, such as disorders of the liver or kidneys, the daily requirement may be as high as 200 to 300 grams. For that reason, it is more accurate to say that the protein required is from 50 to 200 grams per day, depending upon the body needs. The actual requirement of the individual is the amount necessary to maintain normal nitrogen balance; that is, equalize between the nitrogen intake as protein and the output of nitrogen.

Nitrogen can be determined readily in the laboratory. Approximately 16 per cent or $1/6$ (to be more exact, $1/6.25$), of the protein molecule is composed of nitrogen. Thus by multiplying the nitrogen determination by the factor 6.25, the amount of protein taken in or given out can be calculated. Individuals during growth, pregnancy, and convalescence are usually in positive nitrogen balance. Patients suffering from trauma, surgery, fever, or liver, kidney, and certain other diseases where protein needs are great, are in negative balance, unless protein is supplied in relatively enormous

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amounts in the food or by administration of hydrolysates.

Amino acids, as has been stated, are the fundamental building units of proteins. Twenty-three different amino acids are found in proteins used to meet bodily needs. Many of these can be built up within the body itself. On the other hand, 10 of such acids cannot be manufactured in adequate amounts in the body, hence must be supplied in the food. They have, consequently, become known as *essential amino acids*. The other 13 are called nonessential. Unfortunately this is not a good term because they *are* essential, or necessary for proper nutrition. The word merely means that some of these acids can be synthesized in the body in adequate amounts and it is unnecessary, or not essential, that they be taken in from the outside.

Proteins may contain several thousand molecules of some of the 23 amino acids. These are laid down in definite or regular patterns within the protein molecule. Serum albumin, one of the best known proteins, with a molecular weight of about 70,000, contains 618 amino acid units. All of the amino acids are not contained in all proteins, but those that do have all of the essential amino acids are known as *complete* proteins. These are usually of animal source, such as meat, and the milk proteins, casein and lactalbumin. Incomplete proteins, on the other hand, are those which do not contain all of the essential amino acids, and are usually of plant or vegetable origin. In spite of their deficiency in certain amino acids, these foods serve as excellent nutritional elements in mixed diets which contain other proteins. The sum total of such a diet should give all of the essential amino acids.

PROTEIN DEFICIENCY

We are not particularly concerned here with an excess of protein. The chief problem is that of a deficiency, or inadequate amount of protein in the body. This condition is often referred to as "hypoproteinemia." One can readily understand that such a designation may be misleading for hypoproteinemia refers only to plasma proteins and is no indication of the depletion of proteins in the tissues. An individual on a deficient protein intake may lose as much as thirty times more nitrogen or protein material from the tissues than from the blood. The body has the ability to hold a reserve supply of protein in the blood until the protein in the tissues has been drained to a dangerous degree.

The protein reserves in the tissues may therefore be almost entirely used, and at the same time blood tests will give a relatively normal plasma protein determination. Consequently, clinical judgment, observation, and past history of the patient may be more important than laboratory findings on the plasma proteins. For example, a physician does not need a laboratory test for plasma proteins in order to know that a patient with a condition such as gastric carcinoma, who has been on a poor diet for several months, and who has lost 20 to 40 pounds in weight has a protein deficiency.

CAUSES OF PROTEIN DEFICIENCY

The causes of protein deficiency may be grouped as: 1. insufficient intake, 2. faulty utilization, and 3. excessive elimination. Although examples of these are obvious, a few factors should be mentioned. Under insufficient intake may be included undernourishment, malnutrition, and famine. Another type of insufficient intake occurs when an individual eats adequate amounts of protein, but not enough of the protein-sparing carbohydrates which normally serve as the source of immediate energy. When the carbohydrates in the diet are inadequate, the body utilizes protein for energy and does not leave a sufficient amount for supplying nitrogen to the tissues. There may be very real disturbances involved, such as anorexia nervosa, with its extreme aversion to food, pain and discomfort because of faulty dentures, and obstructions of the gastrointestinal tract, such as tumors and strictures.

Imperfect utilization of food because of inadequate secretion of digestive juices, or enzymes as in achlorhydria, gastritis or enteritis, or faulty absorption must also be considered. There may be excessive loss due to pernicious vomiting, chronic diarrhea, dysentery, ulcerative colitis, or sprue. Stools which are bloody or contain pus may indicate that additional protein is being lost. Chronic hemorrhages from fibroids, hemorrhoids, uterine or rectal carcinoma are frequently sources of protein loss. Deficiency caused by kidney disease may be great and require an increased amount of protein to counterbalance the loss. Farr, et al, within a two-year period reduced mortality of nephrotic patients with pneumococcal bacteremia from 60 per cent to almost zero by maintaining the patients in nitrogen balance by the additional supplementary administration of protein hydrolysates¹.

Other conditions which cause loss are: burns, hypoxia, hemorrhage, and increased metabolism. Fever or infection bring about an increased breakdown of proteins within the body resulting in an excessive loss of nitrogen. During a course of artificial fever therapy, nitrogen loss may be as high as 50 to 150 grams, which in terms of protein may be equivalent to one to two pounds of body protein. The metabolic activity of thyrotoxicosis causes a rapid nitrogen depletion; 60 to 70 per cent of such patients show protein deficiency. Pregnancy is accompanied by increased demands on the part of both mother and fetus. The decreased incidence of toxemias following improved prenatal care in which higher protein diets are given speaks eloquently for the importance of this therapy.

The very act of lying in bed for an extended period of time may cause negative nitrogen balance. An excellent study illustrating this factor was made on conscientious objectors and reported several months ago.² In these experiments, healthy young normal individuals were placed in casts from the hips down for periods of six weeks, during which time it was difficult to maintain them in positive nitrogen balance. Approximately six weeks elapsed after removal of the casts and a return to regular active life before normal metabolic activity was attained. Thus any condition in which there is debilitation requiring continual bed rest means an increased loss of nitrogen and a protein deficit in the body.

The problem of protein deficiency after surgery must always be considered. Previous to operation, the patient is frequently on a reduced food intake; he may have impaired digestion and absorption, and often a complicating chronic infection with fever. The trauma of surgical manipulation itself involves a considerable loss of nitrogen. In a traumatic incident, such as fracture of a femur, or severe burn, 30 to 40 grams of nitrogen may be lost per day over and above the regular loss. Transposed into protein equivalent, this may mean as much as 200 grams of protein depletion each day. During surgical manipulations, nitrogen loss sometimes becomes two to four times greater than normal. Sixty per cent of patients subjected to major surgery show hypoproteinemia, and the incidence increases to over 80 per cent when the surgery involves the gastrointestinal tract. Anesthesia itself may be a cause of increased tissue breakdown. One can readily see, therefore, the im-

portance of the administration of protein substances in pre- and post-operative care.

Clinical conditions ascribed to protein deficiency include disturbances in water balance, lowered resistance to infection, retarded wound healing, anemia, and a disturbed function of the individual cells of each organ and tissue in the body. In nutritional edema, which is a good example of a fluid imbalance, the body and blood proteins reach such a state of depletion that osmotic colloidal pressure can no longer maintain normal hydrostatic blood pressure in capillaries. The resultant fluid accumulation is greater than the lymph flow can handle and edema results. Patients in this condition usually are afflicted with anorexia and asthenia, which, unless corrected, intensify a vicious cycle.

In the edematous condition one sometimes overlooks the fact that visceral organs are also affected. For instance, in such conditions, the gastrointestinal tract is edematous, friable and swollen. Its normal functions of motility, secretion, and absorption cannot be carried on properly. The same is also true of the kidney, liver, and other structures of the body. In recent experiments on laboratory animals, we have found that sex cycles cease after the animals have lost ten per cent of their weight following a protein deficient diet. When 30 percent of the body weight is lost, it sometimes requires months before the animals return to their normal reproductive functions. One can contemplate the relationship of chronic protein deficiency to sterility, menstruation, and other functions of the sex glands.

Anemia is always a by-product of severe chronic protein deficiency. This might be suspected, since 95 per cent of hemoglobin consists of amino acids. Experimentally, anemia may be produced by placing the individual on an inadequate protein intake. Thus in therapeutic procedures concerned with the treatment of anemias, proteins should be considered along with iron and erythrocyte-maturing factors.

It has been well established that dietary protein restriction leads to a lowered resistance to infection. Some have offered the explanation that there is a diminution in the production of phagocytic cells during the accompanying atrophy of the liver, spleen, bone marrow, and lymphoid tissue. The immune antibodies which are present in plasma as gamma-globulins are three to five times as high in well-fed individuals as in those on protein deficient diets³. This probably explains the increased incidence of

epidemics and pestilences following famine or war.

Also in this category may be included wound healing, which is retarded during protein deficiency and speeded up when adequate protein is added to the diet or administered in other ways. A disruption in healing is a complication in one to three per cent of abdominal operations. Clinical studies and laboratory experiments indicate that a high percentage of such cases can be attributed definitely to protein deficiency⁴.

When diet is markedly restricted in the treatment of obesity, it may be difficult to maintain a high protein intake, low in fat content. For the well-being of the patient, nitrogen balance should be maintained.

In peptic ulcer, negative nitrogen balance frequently occurs due to hemorrhage in acute cases, or to the prolonged maintenance of the patient on a restricted diet. Diets planned to avoid over-stimulation of acid in the stomach are frequently low in protein so necessary for ulcer repair and the general well being of the patient. When protein hydrolysates are included in the regimen, not only is readily available protein given the patient, but the amino acids act as excellent buffering agents as well.

CORRECTION OF PROTEIN DEFICIENCY

Protein therapy may include: 1. dietary management, 2. the use of blood and blood derivatives, and 3. protein hydrolysates. The indications for the use of any of the above procedures are quite specific, depending upon the nature of the condition causing the protein deficiency.

Diet: The use of increased dietary protein should be considered first in those individuals who, because of appetite and adequate function of the alimentary tract, can ingest and utilize the required amount. Many patients, however, are unable to take in or digest the necessary amount of protein in the form of food. These patients may require parenteral or supplemental feeding.

Blood and blood derivatives: Experience in the late war and in modern surgery has demonstrated the worth of whole blood, blood plasma, and serum albumin. These substances are used when the need is acute and the loss of blood protein is great, such as in severe liver and kidney disease, excessive hemorrhage, or excessive trauma or stress. Many physicians prefer to use whole blood, in that way utilizing the protein of hemoglobin as well as the plasma protein.

Plasma, however, continues to be used extensively to replace the protein lost from the blood. Its chief advantage is that it is effective immediately. Even though proteins found in the infused plasma are eventually broken down or re-formed into the specific types characteristic of that individual receiving the infusion, they have in the meantime accomplished their purpose and helped the patient over the immediate crisis.

For chronic conditions and where the need is not immediate, the use of plasma to replenish the plasma proteins is inefficient. For example, normal plasma contains approximately seven grams of proteins per 100 c.c. of plasma; or 70 grams per liter, thus it would require approximately two liters of blood per day to furnish the minimum of 70 grams of plasma protein for the average sized adult. The use of protein hydrolysates is far less costly and more efficient in these cases.

With the purification of human serum albumin and its availability through the American Red Cross, a new agent to aid in combating the effects of severe protein deficiency has been developed. It is particularly effective in relieving the ascites of cirrhosis, and promises a great deal of assistance in preparing nutritionally hypoproteinemic patients for surgery. Albumin therapy is less effective in the nephrotic state and is of questionable value in counteracting the edema of cardiac decompensation.

Amino acid preparations or protein hydrolysates: Protein hydrolysates may be prepared by treating proteins with 1. acids, 2. alkalies, or 3. enzymes. Alkaline hydrolysis leads to racemization of the resultant amino acids and; consequently, is not used to any extent in the commercial preparation of this type of hydrolysate.

Amino acid preparations may be utilized either parenterally or orally. In cases of extreme weakness and debility, vomiting, diarrhea, ulcerative colitis, the acute stages of peptic ulcer, and similar conditions, the preparation is best given by vein slowly in a two to five per cent solution. Results with Amigen (Mead-Johnson Company) have been most gratifying, with few and only minor side reactions. Parenamine (Stearns) has also been used successfully. An excellent treatise on the subject of "Parenteral Administration of Amino Acid Preparations" has recently been published⁵.

Because of the occasional side reactions, cost, and extra precautions necessary for administration of protein hydrolysates, it

is often preferable to give them orally. The predigested protein is absorbed within 15 to 30 minutes, so there is little work necessary on the part of the digestive tract. A tube may be placed into the stomach or duodenum and, even in cases of gastrectomy the patient may receive nourishment within an hour after surgery.

The chief objection to the enteral use of protein hydrolysates is the taste. We have successfully used one preparation, Nitramac, (Maltine Company) which eliminates this disadvantage by putting the hydrolysate in tablet form. The number of tablets necessary to obtain satisfactory results might seem to be a disadvantage of this preparation. We have found, however, that patients do not seriously object to taking relatively large numbers of the tablets per day. To date, we have given this preparation (Nitramac) to a total of 18 patients. Some of them took as many as 120 tablets a day for a period of 16 weeks. This type of therapy is particularly adaptable as a supplement to the diet in pre- and post-operative treatment, as well as ambulatory patients with varying degrees of debility who require supplemental feeding. As stated above, amino acid preparations are less effective than blood and plasma derivatives in acute conditions. Changes in the concentration of plasma proteins may not become apparent for as long as 10 days after the daily administration of hydrolysate preparations has been started. Clinical improvement, however, may be noted a considerable time before the plasma protein increment is evidenced. This may be due to the prior utilization of the nitrogen to restore other deficient structures before it is used by the body to produce plasma proteins. This is particularly true in cases of many of the vital organs, especially the liver, the weight of which decreases rapidly during fasting, or during inadequate protein consumption.

In an experimental study on laboratory animals, we found that the amount of liver protein decreased an average of 49 per cent after the animals had been on a protein deficient diet for a period of 10 weeks. The body weight loss during this time was 32 per cent. It has previously been shown that this decrease in liver protein represents the loss of actual liver cytoplasm and not the stored or deposited reserve.⁶ After the animals were again placed on an adequate protein intake, 34 per cent

of the deficient liver protein was replenished within seven days. This regeneration in the liver occurred before there was any change in plasma protein or red cell count.

Therapy with protein and protein hydrolysates must be accompanied by adequate amounts of carbohydrates, which are normally used as the immediate source of energy. If insufficient amounts of carbohydrates are present, the body will utilize for immediate energy the proteins that would normally go into the formation of muscle and tissue protoplasm. For this protein-sparing effect as much as 150 to 300 grams of carbohydrates per day are required. Adequate fluids and vitamins should also be furnished, but salt should be used sparingly.

It may not be amiss to give a word of warning here. The exploitation of amino acid preparations is developing to a degree comparable to that of vitamins and cathartics. Many different preparations have appeared in the last few years. Some manufacturers, in an attempt to increase the palatability of their products, or to stimulate the interest of the physician, have combined their preparations with other substances. The patient who requires supplementary protein needs it in rather large doses. Any preparation, therefore, the advertising of which recommends a dosage in terms of teaspoonfuls, should be considered undesirable for the treatment of protein deficiency. Such inadequate therapy is like the proverbial "spit in the ocean."

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ATTEND THE A.M.A.

INTERIM SESSION

ST. LOUIS

NOVEMBER 30—DECEMBER 3

SYMPTOMOLOGY AND TREATMENT OF SPONTANEOUS SUBARACHNOID HEMORRHAGE*

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Acute subarachnoid hemorrhage is the symptom complex of a serious vascular disorder within the skull and as such has many etiological bases. The most widely studied and well understood is that caused by rupture of miliary or berry-like aneurysms located on the circle of Willis. These are often at the bifurcations of the arteries, but others occur on the unbranched segments, the internal carotid artery within its canal and that portion within the cranium. These anomalous dilatations are thought by Dandy¹ to be remnants of an absorbed vascular network which forms the embryonic circulation of the early brain. Forbus² and Tuthill³ have shown that defects in the intimal and muscular coats of the arterial walls are probably the primarily thinned areas where aneurysms develop. Mycotic aneurysms sometimes accompany septicemia and the destructive arteritis may thus cause subarachnoid bleeding. Athero- and arteriosclerosis in the Circle, the carotids and the basilar arteries are other causes for aneurysm formations. They likewise can cause bleeding when they rupture. Syphilitic arteritis is an alleged cause of aneurysm formation; but in perusing the literature one finds little basis in pathological material to support this claim.

Martland⁴ and recently Wechsler and Gross⁵ have presented evidence that vascular malformations of arterial and venous channels and hemangiomas may be associated with abrupt subarachnoid bleeding. The role of primary blood dyscrasias, intracerebral and ventricular hemorrhages, and disorders of the coagulation mechanism associated with heparin and dicumarol therapy should be mentioned as causes for the syndrome under discussion for completeness sake. We have been interested in the variable symptomology in several cases observed recently and attention is brought to them by brief abstracts.

Case No. 1—Miss B. B.—No. 32,570. A 46-year-old utilities clerk was first exam-

ined because of pain behind the right eye and ptosis of the right eyelid. This had sudden onset. Three years previously she had experienced pain behind the right ear. At that time it was excruciating, and over a period of four-five weeks narcotics were needed for relief. Then followed three-four years of relative freedom from pain. Three weeks before examination she had sudden lancinating but intermittent pain in the right frontal area. Nine days previously she awoke with ptosis of the right eyelid and an exacerbation of her retrobulbar pain. At the time of examination she was afebrile, acutely ill and complained of nausea. There was right oculomotor and trochlear paralyses with a fixed dilated pupil on the same side. Other neurological signs were absent. Examination of the spinal fluid revealed normal pressure and grossly bloody fluid which did not clot. The red cells were crenated and the supernatant fluid clear. Skull films, serology and blood counts were all normal. A second lumbar puncture was done three days later with identical findings. With sedation and rest headache subsided. The ocular palsies persisted, but she was able to resume work three months later.

Case No. 2—Miss V. T.—No. 29,500. A 45-year-old schoolteacher was admitted semistuporous with the following history as obtained from relatives. She was well until four months before admission at which time she had gradually increasing bitemporal headaches. Twelve days before admission she experienced more severe pain in her head and after lunch felt faint and became unconscious for a period of an hour and a half. Following this she regained consciousness, became alert and lucid but continued to have headache. Later that day she developed ptosis of the left eyelid. The day of admission she became semistuporous, and the left pupil appeared larger than the right. Physical examination revealed a well developed nourished woman with nuchal rigidity in a semi-stuporous state. There was a left third nerve paralysis and

*Presented before the Section on Medicine at the Annual Meeting of the Oklahoma State Medical Association, May 19, 1948.

weakness of the left sixth nerve, bilateral papilla edema and a flame-shaped hemorrhage in the left disc. No diagnostic lumbar puncture was done. She responded gradually and became conscious over the next few days. The cranial nerve signs persisted. There was a sudden recurrence of all her symptoms seven days after admission followed by a quick demise. Postmortem showed a ruptured miliary aneurysm at the junction of the left carotid and the anterior and middle cerebral arteries. There was moderate extension of the hematoma over the right cerebral lobes and into the base. The aneurysm was surrounded by a soft partially organized clot.

Case No. 3—Mr. H. R.—No. 35,291. Is a married 33-year-old lumberyard operator. This man had experienced left temporal migraine since the age of 20; furthermore, he had complained of many ill-defined somatic discomforts from time to time. Several months before admission he became depressed and anxious. This was thought to be related to his work situation. Eleven days before admission he developed anorexia followed in one day by vomiting and diarrhea. The third day he developed frontal headache, vertigo and blurring of vision. Then followed three days in bed. After this he felt better and upon walking that day he experienced left frontal headache again. Two days later he was examined, and at that time complained of general malaise, mild headache and blurring of vision. Physical and neurological examinations were essentially non-revealing. A GI series was normal. X-rays of the skull revealed no increase in pressure, but an unusually prominent vascular marking in the occiput. A right homonymous hemianopsia was demonstrated after neurosurgical consultation. Following this we did a lumbar tap. This revealed pale xanthochromic fluid with 50 lymphocytes per cc. and normal protein. No further symptoms were noted, and there was gradual recovery with return to work one month later. The hemianopsia persisted.

Case No. 4—Mr. J. C.—No. H-28,067. A 64-year-old farmer entered the hospital comatose. Sixteen hours before while driving a car he suddenly experienced excruciating occipital headache. This was followed quickly by nausea and repeated emesis and progressive stupor. At the time of examination he had a temperature of 100.4°, regular pulse of 62 and deep respirations of 24 per minute. The pupils were equal and fixed with a marked downward gaze. The fundi

were not well visualized. There was marked nuchal rigidity and positive Kernig signs. Deep reflexes were equal and brisk. Bilateral Babinski's were present. Spinal tap revealed marked increase in pressure with grossly bloody fluid which did not clot. Repeated punctures with the removal of 8-12 ccs. of bloody fluid were done over the next 15 days because of restlessness. Gradually the bleeding stopped, the fluid became xanthochromic and eventually clear; and he was able to return to modified work, improved, two months later.

Case No. 5—Mr. K. M.—No. 31,624. A 48-year-old attorney entered the hospital because of a left-sided headache with nausea and emesis of four days' duration. At its onset two grs. of morphine had been needed to allay the severe symptoms. Previous history revealed evidence of marked emotional instability in personal relationships and in his work with mild periodic headaches which were relieved by aspirin. Physical and neurological examinations were entirely normal. There was no nuchal rigidity at the time of examination. He was observed for two days; and because of increasing headache a diagnostic spinal puncture was done, which produced grossly bloody fluid. Two subsequent punctures were done for symptomatic relief of the headache. Twelve days after the onset the patient was free of symptoms, and the spinal fluid was clear in color. He returned to work in one month.

In re-analyzing these few cases, it became obvious that not always does the clinical history of subarachnoid hemorrhage follow the classical sequence of acute headache, pain, stiff neck and coma. For example, in case No. 1 the history covered a period of three years, which we would relate to the lesion, during which time the patient had recurrent symptoms in the right frontal and occipital regions. Finally, with marked expansion and rupture of the aneurysms she developed cranial nerve palsies related to the third and fourth nerves. These together with blood in the spinal fluid made the diagnosis obvious. It is interesting to note that statistical studies showed that 30 per cent to 40 per cent of these patients have repeated episodes and extraocular palsies, one of the most common objective findings. These two signs are probably extremely important in tracing the etiology of headache, which the physician is so frequently called on to do. In case No. 2 the symptoms were of four months' duration, and there was strong suggestion of a space-

occupying lesion in the cranium as evidenced by progressive headache with papilledema and periods of unconsciousness. In view of these signs and symptoms no lumbar tap was done immediately. Only the neck rigidity finally suggested the diagnosis before death. The appearance of papilledema then can readily be a part of the symptom complex of subarachnoid hemorrhage and should always be carefully searched for. In case No. 3 we probably have one of our most interesting findings. After several days' observation, our working diagnosis was depressive psychosis. Only when visual field defects were definitely demonstrated and the history of headache, vertigo and emesis were again separated from the multiple somatic complaints did we entertain the true reason for his main and recent illness. By the time the spinal fluid was examined the acute hemorrhage was apparently subsiding, but the xanthochromic fluid which was highly significant was obtained, and this represented to us previous subarachnoid bleeding. The site of the lesion was probably near the optic tract on the left side. Case No. 4 gave a rather classical history of the onset and development of subarachnoid bleeding. This gentleman was about 64 years old and probably represented bleeding from an arteriosclerotic aneurysm, though this we will probably not know. His onset was sudden, dramatic and rapidly progressive, coma quickly developed and by the time we saw him he was in deep stupor with general signs of rapidly increasing pressure and no localizing findings. During his period of acute symptoms he also had marked restlessness with occasionally generalized tonic-like muscular movements. In case No. 5 left-sided headache of severe character was the only symptom. There were no signs until the spinal fluid was examined and found to be bloody. This is always a warranted procedure in severe headaches without evidence of choked discs.

The plan of treatment has been rather simple until recently. Rest in bed is primary. Sedation is used as necessary and analgesics for pain. Occasionally hypertonic solutions may be used to advantage, either intravenously or per rectum. Repeated lumbar punctures have been used by us to advantage—particularly to relieve the restlessness or increasing stupor these patients often develop. The upright position in bed is occasionally advocated by some, mainly for its mechanical effect. Within the last five years more emphasis has been made for neuro-

surgical treatment in selected cases. If lesions are well localized, either by their symptoms or arteriography, ligation of the aneurysm is occasionally feasible. Careful evaluation before this is done is very necessary, because often one carotid vessel is sacrificed at the time, and tests for the adequacy of unilateral circulation must be made. Procedures such as this are particularly indicated in the early decades and where repeated episodes of bleeding have occurred. Prophylactic treatment can only be carried out where the diagnosis has been made early by arteriograms or by surgical exploration itself. These methods are being used more commonly now; and although the risk to the patient is rather great in the acute episode, these considerations should be kept in mind.

The over-all prognosis in this particular symptom complex is not good. Approximately 50 per cent of the patients died in their acute episodes⁶. Repeated hemorrhage, however, is not necessarily a bad prognostic sign as was formerly thought. At the end of 15 years some statistics show that about 16 per cent of the patients are still living. It is thus obvious that the disease is a serious one and the long range view not particularly good. Consequently perhaps we will be warranted in the future in doing more extensive investigative work when it seems indicated.

In summary, the symptomology of spontaneous subarachnoid is multiple. It includes chronic recurrent episodes of headache often of a migraine character; extraocular palsies—particularly of nerves three, four and six; motor signs of hemiplegia, partial or complete; Babinski signs; Kernig signs; nuchal rigidity! blood in the spinal fluid which does not clot; convulsive seizures; papilledema and hemorrhage and occasionally x-ray evidence of calcified shadow in the suprasellar region or destructive changes in the skull. Treatment at the present time is in a state of change and for the acute episode probably the conservative course is best followed. This includes rest in bed, sedation and repeated lumbar punctures as indicated.

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CLINICAL PATHOLOGIC CONFERENCE

*Presented by the Departments of Pathology and Medicine
The University of Oklahoma School of Medicine*

HOWARD C. HOPPS, M. D. AND ROBERT BAYLEY, M. D.

OKLAHOMA CITY, OKLAHOMA

DR. HOPPS: The major disease from which this patient suffered is probably obvious to all of you who have studied the protocol. The precise status of this disease and the exact mechanism by which it terminated the patient's course is not so obvious. We are looking forward to Dr. Bayley's detailed evaluation of these changes.

PROTOCOL

Patient: L. W., white male, age 61. Admitted October 20, 1947. Died November 3, 1947.

Chief Complaint: Dyspnea (two and one-half years), abdominal pain (three months).

Present Illness: Two and one-half years prior to admission the patient noted the onset of exertional dyspnea. Six months later he suffered an episode of severe precordial pain which radiated down the left arm. His physician advised six weeks bed rest. However, after five days he returned to work. Following apparent temporary recovery there was a gradual onset of increasing dyspnea, pedal edema, orthopnea and paroxysmal nocturnal dyspnea. Six months after the initial episode the above symptoms became quite marked, for which his physician prescribed what apparently was digitalis. The patient continued this medicine erratically from this time. He experienced several subsequent attacks of precordial pain which were initiated by slight exertion. Two months preceding admission he began to have sharp back pain that radiated around the costal margins, relieved only by "hypos." This bore no relationship to meals or to any type of food; however, there did seem to be associated flatulence and eructation. In addition, the patient experienced mild, generalized, dull aching abdominal discomfort. During the three days prior to admission he was nauseated and vomited soon after eating. He lost 50 pounds in the two years prior to admission. There was no diarrhea or melena. One episode of hematemesis occurred one and one-half years ago when there was "some bright red and some clotted blood."

Past History: The patient was jaundiced for four to five months, associated with "white stools" in 1923. One month preceding admission his wife thought he might have been slightly icteric. He has had a left inguinal hernia for eight years and an epigastric hernia for seven years. About eight years ago a generalized painful skin rash was treated by his LMD.

Family History: Mother died at 80 of "heart trouble and a stroke." Father, who died at 87, also had heart disease. Two aunts and one uncle died of cancer.

Physical Examination: Temperature and pulse were normal; respirations were 22; blood pressure 162/104. The patient was a well developed, well nourished elderly white male who became dyspneic on slight exertion. Multiple lipomata were scattered over the entire body. Pupils reacted sluggishly to light and accommodation. Sclerae were questionably icteric. One diopter papilledema was seen on fundoscopic examination; otherwise eye grounds were negative. The neck veins were distended. Lung fields were clear. Examination of the heart revealed the PMI and left cardiac border to be at the anterior axillary line. There was a soft systolic murmur heard at the base and a similar murmur at the apex. There was slight epigastric and bilateral upper quadrant abdominal tenderness. The liver was palpable four fingerbreadths below the costal margin. There was slight shifting dullness, considered as evidence of abdominal fluid. Rectal examination was negative.

Laboratory Data: Admission urinalysis revealed 2+ proteinuria with a sp. gr. of 1.020. There were 13,750 leukocytes with 81 per cent neutrophils, 4.75 million RBC's and 13 gm. Hb. Blood chemistry studies revealed a BUN of 52.6 mg. per cent, calcium 8.5 and phosphorus 3.7 mg. per cent, icteric index 10, total protein 6.85 gm. per cent, with a normal A/G ratio; Mazzini was 3+, Eagle 4+, but Kahn and Kline were negative. Venous pressure was measured as

250 mm. of saline. Circulation time from arm to lung (ether) was $24\frac{1}{2}$ seconds. ECG on October 21, 1947 was interpreted as interference dissociation, moderate LVH and digitalis effect. A chest x-ray the next day showed the heart to be markedly increased in size with widening and calcification of the aorta. There were increased hilar markings in the lungs.

Clinical Course: Digitalis was administered and other general measures were instituted for relief of his congestive failure. Morphine and demerol were necessary to control the radiating costal pain. The patient had repeated episodes of dyspnea and substernal pain. After temporary improvement, during the first few days, he regressed and failed progressively, became moribund and died on the 13th hospital day.

CLINICAL DIAGNOSIS

DR. BAYLEY: As we review this patient's history and hospital course, we come first to the symptom of exertional dyspnea. It was this that ushered in the present illness and it is this which first directs our attention to a primary disease of the cardiovascular or respiratory tract. From this symptom alone we cannot tell which is primarily involved. We learn that six months later the patient suffered an episode of precordial pain. This is a cardinal symptom of cardiac ischemia and the fact that six weeks bed rest was advised makes us believe that the attending physician at that time considered this to be an effect of coronary disease. We read further to find that there was "a gradual onset of increasing dyspnea, pedal edema, orthopnea and paroxysmal nocturnal dyspnea." This sentence tells us a great deal. We can now state with assurance that this patient has serious heart disease.

At this patient's age, 61, there are three etiologic factors which are responsible for most heart failure: (1) Hypertension, (2) Arteriosclerosis and (3) Syphilis. Since some of the patient's signs and symptoms appear to have been the direct effect of "coronary pain", we must consider which of these three diseases to be most apt to produce such an effect. The cause of coronary pain is in dispute. Some believe it to result from ischemia of the myocardium; others consider it an effect of spasm of the vessel wall. Coronary pain occurs most often in arteriosclerotic heart disease, but it occurs with some frequency also in leuetic heart disease. In the latter case this is the result

of narrowing of the coronary *ostia* with subsequent reduction in coronary blood flow. However, these persons do not ordinarily manifest outright attacks of so-called typical heart pain. They may have sensations of vague discomfort, choking or pressure behind the sternum, but usually syphilitic heart disease is without sharp pain which radiates down the arm. These patients may have attacks of nocturnal dyspnea. Nocturnal dyspnea, if due to heart disease, is related to transitory episodes of pulmonary edema. The left ventricle being weakened fails for awhile and fails to move sufficient blood from the lung as provided by the right ventricle. Pulmonary edema results.

The patient experienced several subsequent attacks of coronary pain which were precipitated by mild effort. The sharp back pain radiating around the costal margins which the patient described is impossible to evaluate without more information than we have here. This suggests a radicular type of pain, as is commonly associated with chronic hypertrophic arthritis. Occasionally heart pain will be described in somewhat this manner. If this pain were the effect of radiculitis it would not have been precipitated by exertion and, on the other hand it would probably have been relieved by assuming a certain bodily position. If we had such information within this history we would probably be able to resolve this question. In addition to this, the patient complained of mild generalized abdominal discomfort. As we continue with the history we find that this patient had gone on with his heart disease to a state of general congestion including such effects as enlargement of the liver. This, with congestion of other abdominal viscera is adequate to explain the generalized abdominal discomfort.

It is stated that the patient had lost 50 pounds in the last two years. This is rather on the high side of that which we would expect to occur as a result of congestive failure. Weight loss of such a degree suggests one of three common causes: diabetes mellitus, toxic goiter, or malignancy. There had been no diarrhea or melena, although there was one episode of hematemesis one and one-half years ago. In a man of this age, the vomiting of bright red and clotted blood, without prior gastric symptoms, would most likely be the result of peptic ulcer. These patients will often have as their first symptom of gastric ulcer, the vomiting of blood and will come into the hospital for this reason, without pain.

From the history then, we feel pretty certain that our patient has heart disease. Probably arteriosclerotic, but possibly hypertensive. Luetic heart disease also remains a possibility. It may be that there is a combination of two of the three.

From the past history we note that 25 years ago the patient had a period of jaundice associated with white stools. I don't believe we can do more than speculate on the cause of such an attack. He might have had infectious hepatitis or he might have had a stone obstructing the common duct which became dislodged, although there is no statement of associated pain. The generalized painful skin rash of eight years ago brings up again the possibility of syphilitic heart disease since this may have represented a secondary stage of syphilis. The question of cancer also crops up again as we note the family history and we reconsider the episode of hematemesis of one and one-half years before. If this had been the result of carcinoma of the stomach, continued growth during the succeeding one and one-half years should have produced obvious signs and symptoms.

Now to consider the physical examination. From the blood pressure of 162/104 we can assume that the patient had hypertension. Since the patient had congestive failure at the time this pressure was taken, it is likely that, if anything, it is lower than its "normal." Occasionally in hypertensives, following the onset of congestive failure, the blood pressure will fall to such a degree that it is within normal limits. It may remain at this level for a period of years. The cause of this lowering of blood pressure is not known. It is not simply the effect of a weakened heart, unable to maintain the pressure necessary to force blood through the constricted arterioles. In the case at hand, the blood pressure is not sufficiently high to assure us that hypertension is the major factor in this patient's heart disease. We do know that arteriosclerotic changes and degenerative changes in general bring about a more rapid course than does hypertension. On the other hand oftentimes these two conditions, arteriosclerosis and hypertension, co-exist. At the moment we will consider that our patient may be suffering from the combined effects of these two diseases. The sluggish reaction to light and accommodation of the pupils and the questionable icterus of the sclerae (together with other signs described,) are expected effects of marked congestive heart failure.

The papilledema seen on fundusoscopic examination cannot be readily attributed to passive congestion and may have been the result of arteriosclerosis. The enlarged cardiac silhouette determined upon percussion and palpation, is at last positive objective evidence of heart disease. The soft systolic murmur heard at the base and the similar murmur at the apex have relatively little significance in a patient in this condition. If the systolic murmur had been transmitted to the neck and, particularly if it were associated with a thrill, we would seriously consider calcific aortic valvulitis as a basis for the heart disease.

The liver edge extended four finger-breadths below the costal margin which indicates a considerable degree of hepatic congestion. The pain and tenderness associated with hepatic congestion is greatly influenced by the rate at which the enlargement develops. It is more dependent upon this than on the degree of enlargement as such. With this much hepatic congestion we might expect a slight degree of icterus such as was observed in this patient. By the physical examination alone we have almost excluded syphilis as a basis for the heart disease since we have no evidence of any of the signs or symptoms which are commonly associated with syphilitic heart disease. There is no evidence of an aneurysm or aortic insufficiency.

To turn to the laboratory data, the 2+ proteinuria is an expected finding in congestive failure. The specific gravity of 1.020 indicates good renal function and tells us that hypertension here has not produced serious renal disease. The blood urea nitrogen was elevated to 52.6 mg. per cent. How high may the blood urea nitrogen go as a result of congestive heart failure alone? The NPN may reach 100 mg. per cent in congestive heart failure without primary renal disease. This BUN is perfectly compatible with the diagnosis of congestive failure. Continuing we find that two serologic tests for syphilis were positive, two were negative. This allows us the prerogative of resting entirely with our clinical observations so far as syphilis goes. Circulation time was moderately delayed, additional evidence of congestive failure. The electrocardiogram gives us little information that we do not already have save "interference dissociation" which indicates that the ventricles and the atria were beating at different rates. A chest x-ray revealed the cardiac shadow to be markedly increased in size, which fact

we already knew. The additional information of widening and calcification of the aorta is furnished. In syphilitic aortitis there is frequently marked calcification of the aorta. With these calcific plaques as a marker, the outline of the aorta may be well defined and seen to be quite irregular in contrast to the more uniform dilatation that occurs in hypertension with atherosclerosis. The increased hilar markings of course go with congestion.

The average course of events in a patient with hypertensive heart disease who comes in the hospital for the first time in congestive failure is to recover with treatment. They ordinarily recover from their second attack of congestive failure. To sum it up, the average patient with uncomplicated hypertensive heart disease enters the hospital between three and four times with congestive failure before he reaches his terminal admission. The patient that we are discussing this afternoon seems to have had his last admission on the first visit to the hospital. This has an important implication. The part of the hypertensive heart disease that we can do something about is the work strain on the heart, but if there are fairly advanced coronary changes accompanying the process, there are secondary effects of this ischemia in the myocardium which we cannot correct. Such patients cannot make the comeback which those patients who possess a good coronary circulation do. The course of events in this case therefore suggests that the patient had rather serious alterations in his coronary circulation. The electrocardiogram did not show any definite evidence of myocardial infarction. Does the absence on the electrocardiogram of diagnostic changes exclude cardiac infarction? No. With a routine electrocardiogram we cover primarily the anterior wall of the heart, the diaphragmatic and left axillary surfaces of the heart. The posterior regions are not well covered by such routine leads so that it is possible that an infarct could escape detection without use of multiple precordial leads or perhaps an esophageal lead.

In summary, I believe that this patient had arteriosclerotic and hypertensive heart disease, with congestive heart failure. The fact that he died upon his first admission to the hospital with congestive failure, plus the fact that he complained of precordial pain, indicates that there was probably severe myocardial damage, else he would

probably have made satisfactory recovery following treatment with bed rest and digitalis.

CLINICAL DISCUSSION

QUESTION: Could the hematemesis have been an effect of a ruptured esophageal varices?

DR. BAYLEY: We have no subsequent data to indicate that this patient had Laennec's cirrhosis. Cardiac cirrhosis does not produce sufficient alteration in blood flow to lead to these changes.

PATHOLOGIC DISCUSSION

DR. HOPPS: Reversing our usual procedure I would like to present some histopathologic changes first and correlate them with the disease process as been discussed by Dr. Bayley. The first organ for discussion is the pancreas. Not because of changes in the pancreatic tissue as such, but because of more significant changes in peripancreatic arterioles and small arteries. We found here the *hyperplastic sclerosis* which is the morphologic basis for the fixed stage of hypertension. You are all aware that hypertension is a disease of arterioles. The early stages of hypertension are characterized by spasm, without morphologic changes. If the disease continues, morphologic changes develop in these small vessels, as I shall illustrate to you. There is hypertrophy of muscular coat with a comparable thickening of the intima, these changes leading to an appreciable decrease in size of the lumen. Hyaline change or fibrinoid necrosis is a late effect. On this then we base a pathologic diagnosis of hypertension. Changes in the kidney, namely, slight arteriolonephrosclerosis, further support this. Dr. Bayley was correct, however, in assuming that this patient's kidneys were not seriously diseased, except as affected by chronic passive congestion. The second tissue I shall demonstrate is the aorta in order to illustrate *atherosclerosis*. In this patient, this condition forms the counterpart of the hypertension which I have just mentioned. The two together form a disease complex which, as this patient illustrates, is a bad combination. This same change, atherosclerosis, had occurred in coronary arteries to a marked degree, and herein lay the major difficulty. Hypertension, on the one hand, requires progressively greater cardiac activity and progressively more blood supply in order to maintain a state of balance as opposed to progressive sclerosis of coronary arteries on the other hand which leads to less and less flow of blood and brings a

progressive decrease in the ability of the heart to function.

The heart showed the effects of these changes as Dr. Bayley hypothesized. These changes were reflected in two *old* infarcts (one to two years), one posterior four cm. in diameter, and one anterior seven cm. in diameter. The precipitating cause of death was a condition of *recent infarction* superimposed up on *each* of the old infarcts. This presents some very interesting problems which perhaps Dr. Bayley will wish to discuss. We observe rather frequently that infarction occurs either in successive stages or as a prolonged process rather than as a sudden event. This case illustrates that very dramatically. In both instances the left coronary artery was involved. In one, the anterior descending branch, in the other the posterior descending portion of the circumflex branch was affected. To turn our attention to the kidney, we find a secondary effect of cardiac infarction. The kidney. It, too, presented several recent infarcts. These represent an important complication of recent cardiac infarction, namely, embolic phenomena resulting from dislodgment of a portion of mural thrombus overlying the ventricular infarct. In this instance the only serious effects of thrombotic emboli so originated were found in the kidneys. Finally, to consider the liver, spleen and lungs, we find morphologic evidence of congestive heart failure which was a secondary effect of the primary disease complex, hypertension-atherosclerosis. The liver, in particular, shows the effect of chronic passive congestion and presents areas of frank focal necrosis involving centrilobular portions. Although the *necrosis* is probably an agonal phenomenon, yet the degree of damage indicates prolonged dysfunction and is sufficient to account for the questionable slight icterus which the patient exhibited. When we fit these cellular changes into a broad pattern we reconstruct the sequence of events and provide a basis for explanation and understanding of this patient's signs and symptoms. I only wish that our studies could reveal the essential nature and pathogenesis of hypertension and of atherosclerosis. Our final anatomic diagnosis was:

Cardiac hypertrophy and dilation—clinically hypertension

Hyperplastic sclerosis of small arteries and arterioles with arteriolonephrosclerosis — morphologically, hypertension

Atherosclerosis, marked, of coronary arteries, aorta, and its major branches

Thrombosis of left coronary artery, old and recent, with old (2 years) and recent (36 hours) infarction

Mural thrombosis of left ventricle and right auricle

Infarcts, recent, fading, in both kidneys

Chronic passive congestion of liver and spleen with focal necrosis of liver

Glycogen infiltration of hepatic nuclei, marked

Fibrous adhesions, old, pleuro-diaphragmatic, lower lobe of right lung

Fibrous adhesions, old, peritoneal, omental, and cecal, to parietal peritoneum

Atrophy of right testicle

Lipomata, subcutaneous, generalized

You will see from this that there are several questions which we have not answered. The nature of the man's back pain is not evident from our studies. We were not aware of its significance at the time and did not investigate the possibility of hypertrophic osteoarthritis. The cause of jaundice described in the past history remains undetermined. If this had resulted from obstruction of the common duct by stone, there should have been residual evidence of cholelithiasis and cholecystitis, which there was not. This may have been the result of catarrhal jaundice which healed without residuum. Careful examination of the stomach and duodenum revealed no evidence of old or recent ulceration, nor were there other changes which might have been a basis for hematemesis a year and a half ago.

DISCUSSION

DR. BAYLEY: It is rather difficult to correlate this man's signs and symptoms with the four distinct infarcts which were found at autopsy. Particularly during the terminal stages of a patient with congestive heart failure, cardiac infarcts may occur and be "silent." The secondary effects of cardiac infarction which resulted from dislodgment of portions of mural thrombi within the heart have been illustrated here and this point deserves emphasis. As many as 30 per cent of patients dying from cardiac infarction have died as an effect of the secondary embolic phenomena. This is the reason for the considerable success some have experienced in using dicoumarol since this prevents the formation of mural thrombi

with their potential hazard. Regarding the question of superimposed infarction, we have occasionally been able to follow the progress of a growing infarct by means of electrocardiographic studies. At least one cause of such a change lies in the progressive growth of the thrombus which extends to occlude more and more branches of an artery.

Therapy with anticoagulants would be expected to prevent such changes. Another factor to consider is that at the margin of any circumscribed infarct there is a broad zone in which ischemia exists, but of not such an intensity as to cause actual death of the tissue. These peripheral zones are obviously more susceptible to infarction than normal myocardium in that they possess no circulatory reserve.

TWENTY-FIVE YEARS AGO

MEET OUR CONTRIBUTORS

Editorial Notes—Personal and General

Dr. G. A. Wall, Tulsa, is attending the College of Surgeons at Chicago.

Dr. Shade Neely, Muskogee, spent a week attending the clinics at Kansas City.

Dr. K. D. Gossom, Custer, returned recently from several weeks' vacation spent in the West.

Dr. S. J. Bradfield, Bartlesville, attended the American Legion convention at Frisco, last month.

Dr. and Mrs. J. R. Hinshaw, Butler, announce the arrival of J. Raymond on October 8th, weight 8 pounds.

Dr. and Mrs. F. L. Wormington, Miami, spent a few weeks at Kansas City, the doctor attending the clinics.

Dr. and Mrs. B. W. Ralston, Okmulgee, returned from a three weeks' motor trip in the western part of the state.

Dr. Morris Lhevine, Tulsa, is again in his office after two months spent in the northern and eastern Radiographic laboratories.

Dr. R. F. Cannon, Miami, returned recently from a three months' trip through Europe, having visited London and Paris and other points.

Dr. H. D. Murdock, Tulsa, and family, have returned from a motor trip to the Pacific Coast, via the southern route, thence up the Coast to Washington and back home via Yellowstone Park and Colorado.

Dr. Warren T. Mayfield, Norman, chairman of the clinic committee of the Norman Kiwanis club medical clinic for underprivileged children, opened the clinic at the Red Cross rooms there last month. It is fully equipped for examination and minor operations, and will care for patients on Tuesdays and Fridays, with a staff of Norman doctors in charge.

John G. Matt, M.D., Tulsa, wrote "Basic Pre- and Post-Operative Treatment for Cancer of the Colon" in this issue of the Journal. Dr. Matt was graduated from the University of Tennessee in 1935 and limits his practice to his specialty, proctology. He is a member of the International College of Surgeons and until 1941, he was chief surgeon, U. S. Lines, New York City. He is secretary-treasurer of the Tulsa County Medical Society and a member of the House of Delegates of the O.S.M.A.

Marque O. Nelson, M.S., M.D., Tulsa is the author of "Ringworm of the Scalp: Treatment by X-Ray Epilation" in the November Journal. Dr. Nelson, whose specialty is dermatology, was graduated from the University of Minnesota in 1923. He is a member of the Oklahoma Dermatological Association.

Robert C. Lawson, M.D., now of Medford, Mass., and formerly of Oklahoma City, presented the paper, "Symptomatology and Treatment of Spontaneous Subarachnoid Hemorrhage." Dr. Lawson was graduated from the University of Illinois College of Medicine in 1941 and specialized in internal medicine. He was also in the U. S. army medical corps. At the present time Dr. Lawson is a fellow in medicine, George F. Baker Clinic, New England Deaconess Hospital, Boston, Mass.

Arthur A. Hellbaum, Ph.D., M.D., Oklahoma City, is the author of "Protein Metabolism and the Use of Amino Acid Preparations." He received his Ph.D. degree from the University of Wisconsin and was graduated from the University of Chicago School of Medicine in 1943. Dr. Hellbaum is professor of pharmacology at the University of Oklahoma School of Medicine at the present time. Among other organizations he is a member of the Society of Experimental Biology and Medicine and the Physiological Society.

The Veterans Administration operates 126 hospitals in the United States. Beds totalling 119,607 are available to veterans in 126 Veterans Administration hospitals.

Additions to Veterans Administration hospitals just completed have added 10,362 hospital beds for veterans throughout the nation.

Veterans Administration hospital libraries contain 952,000 volumes, an increase of 19.7 per cent over the corresponding period a year ago.

President's Page

Your Public Policy Committee early in the year recommended that District meetings be held for the doctors throughout the state. These meetings had several purposes. The two main purposes were to discuss problems facing the medical profession and to organize the profession for proper handling of the problems.

Your officers, councilors, and executive office have carried out the greater part of the recommended program. Many District meetings have been held and others are being held as this is being written. The spirit and attendance at the meetings have been fine.

The next big assignment for us is to assist the State office in the legislative program. Your officers and committees have functioned well in meeting with the legislative council. The last meeting with the legislative council will be held the week in which this is written.

All of you will be interested in the Interim Session of the American Medical Association for general practitioners scheduled for November 28 to 30. These practitioners deserve our tribute and encouragement. It is suggested that many of you make an effort to attend this session.

This last observation is in order. The district meetings have revealed that many of our good doctors do not realize the importance nor the function of the House of Delegates of the Oklahoma State Medical Association. It will be worthwhile for each member of the profession to spend a few minutes studying the operation of the House of Delegates.

C. E. Northcutt

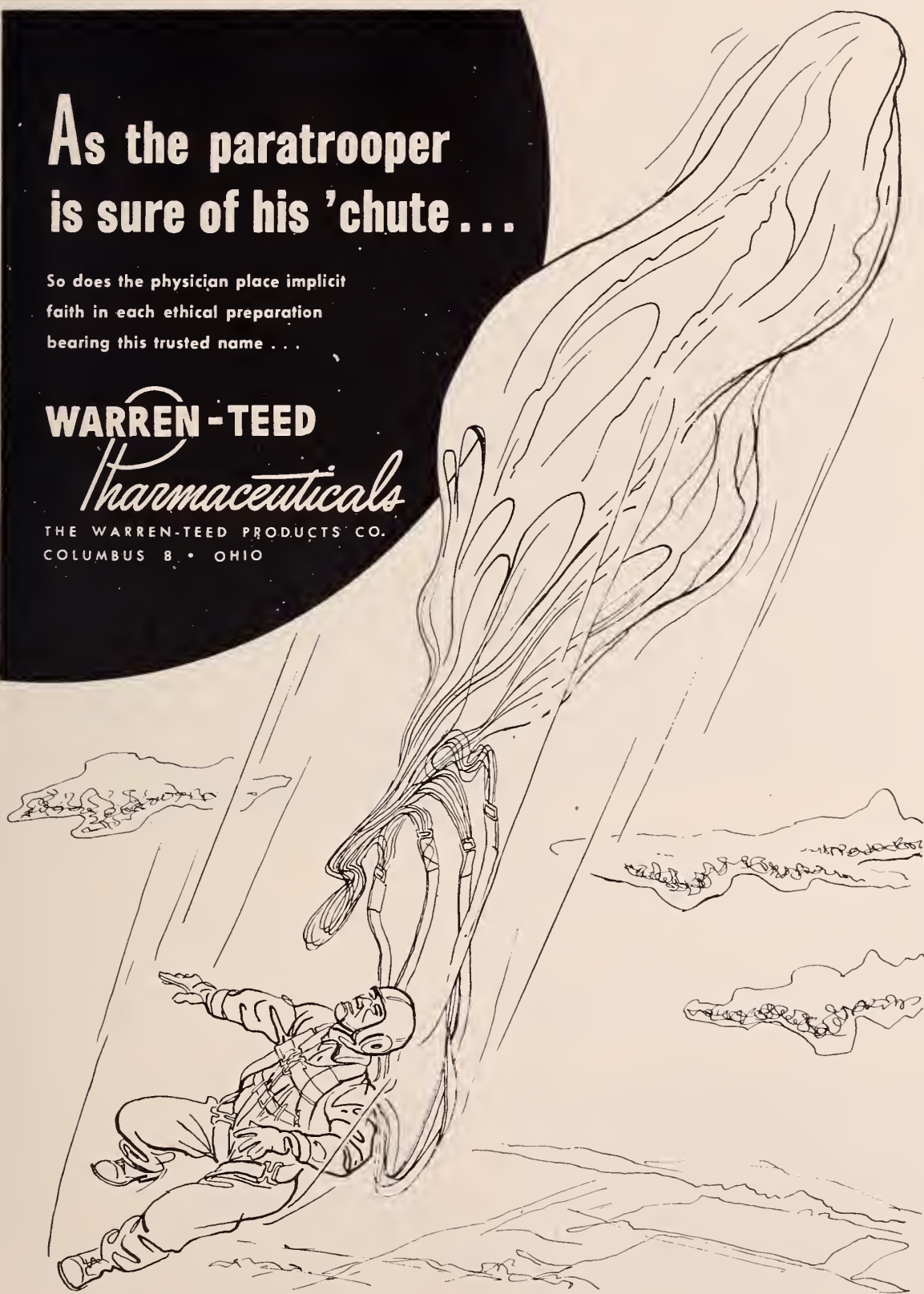
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GENERAL NEWS

INTERIM SESSION SLATED IN NOVEMBER

The first national medical public relations conference under the sponsorship of the American Medical Association will be held in connection with the A.M.A. Interim Session in St. Louis. The public relations conference will be held November 27 and the Interim Session is slated for November 30 to December 3. The state secretaries and editors will convene November 28 and 29.

Planning to attend the Interim Meeting as Oklahoma representatives are delegates C. R. Rountree, M.D., Oklahoma City, and James Stevenson, M.D., Tulsa; C. E. Northcutt, M.D., Ponca City, O.S.M.A. president; George Garrison, M.D., Oklahoma City, president-elect; and executive office representatives Dick Graham and John K. Hart.

Designed to be especially valuable to the general practitioner, the session will offer lecture meetings, conducted by medical leaders, on conditions most often seen in daily practice. Subjects to be discussed include diabetes, heart disease, cancer, poliomyelitis, obstetrics, pediatrics, dermatology, genito-urinary conditions, hypertension, anesthesia, tuberculosis, jaundice, laboratory diagnosis, x-ray diagnosis, and physical medicine as applied to the treatment of arthritis.

Diagnosis and treatment will be stressed in a wide variety of clinical conferences, which will be correlated with the lecture meetings. Evening programs will feature distinguished speakers, the award of the general practitioner medal, and fun. Entertainment will be provided, free of charge to physicians and their guests of course, by stars of the amusement world. A scientific exhibit with nearly 100 displays will show clinical and pathological material on subjects dealt with in the clinical conferences. More than 115 leading firms will display technical exhibits.

Officers and members of the House of Delegates will stay at the Statler hotel. Those attending the medical public relations conference will stay at the Lennox hotel. A registration form which enables the physician to save time by securing a registration card in advance is appearing in the Journal of the American Medical Association every other week until the meeting. All reservations must be cleared through the Chairman, Subcommittee on Hotels, American Medical Association, Hotel Reservation Bureau, 1420 Syndicate Trust Building, St. Louis 1, Mo., and must be received before November 9, 1948.

NEW PLAN GIVES STUDENTS MORE TIME IN HOSPITAL

Through the new curriculum now in operation at the University of Oklahoma School of Medicine, junior and senior students have no more than two hours lecture in any one day, with the remaining time spent in the hospital.

Juniors spend the time they are not in class in the in-patient department and seniors are assigned to the out-patient clinic. This arrangement gives students a period of uninterrupted training in wards and clinics. Increasing the efficiency of the plan are the six clerkships,

coordinators supervising the training of junior and senior students. Tom Wainwright, M.D., is coordinator in chief.

The new plan, which is a new departure of the Oklahoma medical school, is working well and is proving more satisfactory to both faculty members and students, it was said. Twenty other medical schools in the country are now using the same plan.

In the new curriculum there is more emphasis on psychiatric training than in the past. First psychiatric clinics are in the freshman year and juniors spend a week in psychiatric clerkship at Central State Hospital, Norman.

Instead of lectures, each major department has been assigned one afternoon period from four to five for conferences for juniors and seniors. These conferences are open to every physician whenever it is possible for any of them to attend, it was pointed out. Therapeutic clinics are held on Monday, medicine on Tuesday, clinical pathologic conference Wednesday, obstetrics and gynecology (alternating with pediatrics) Thursday, and surgery Friday. Conferences are held at the same time each day. The time, four to five, was selected by necessity because of out-patient clinics, surgery, etc., in the morning and lectures in the early afternoon, it was said.

Reports from the medical school also indicate that the mental health clinic is functioning well and is expanding.

The new wing is now open and the departments not operating at the present time are being held up because new equipment on order has not been received. Surgical equipment is not yet complete but the x-ray department is functioning and the laboratories are completely moved. The fourth floor is open to patients with 36 beds being used. The present facilities in the children's hospital and the main hospital are still cramped and more space is needed in the out patient department. The number of beds for pediatric training is inadequate, it was said. However, a total of 105 beds have been opened in the Children's hospital and the University hospital since Dr. Mark R. Everett assumed his duties as dean, it was explained.

RETAILERS DENOUNCE COMPULSORY HEALTH INSURANCE

As evidence that the medical profession does not stand alone in its fight for the free enterprise system, not only for themselves but for all other business and professional groups, the following from the Special Bulletin of the Oklahoma Retail Merchants Association is quoted:

"Compulsory Health and Disability Benefit Insurance. This is a hot number and it is on the way if we do not block it. Three states have already adopted this sort of legislation and already they are beginning to suffer. No matter how it is sugar coated to make the voters swallow it, the bitter taste comes out as soon as a new bureau begins to operate at the capitol of your state. It is bitter medicine and we retailers in Oklahoma want no part of it. Tell your Legislator that."

Paralyzed veterans, entitled to federal aid for homes specially designed for wheel chair living, may obtain application forms at any Veterans Administration office.



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RESEARCH IN THE SERVICE OF MEDICINE

SEARLE

STATE PRAISED FOR RESEARCH FOUNDATION

Alan Gregg, M.D., director for the medical sciences of the Rockefeller foundation at New York, told members of the Oklahoma Medical Research Foundation's committee that "mere size or vast appropriations of money do not guarantee results in the field of medical research."

Dr. Gregg met with the committee for three days in September inspecting the plans of the Oklahoma Foundation and going over other details with the committee.

He also praised the people of Oklahoma for their willingness to contribute money and pointed out to the medical leaders, "You must continually bring the public in on what you are doing. You will fail if there is not an enthusiastic understanding on the part of the public of the importance of true research."

Urging close cooperation between the medical school and the foundation, he asked the foundation to work closely with the school in the cultivation of students who will eventually go into the field of research. He concluded his address with "Finally, its proximity to the medical school will act as a vital spark, improving the whole tone of medical education."

While in Oklahoma Dr. Gregg also spoke to student and faculty audiences at the University of Oklahoma and the medical school and Oklahoma A. and M. College.

TUBERCULOSIS LEADERS HAVE STATE CONFERENCE

"If we could make everyone believe that tuberculosis is a communicable disease, that it is preventable and is curable if found in time, tuberculosis would soon cease to be the major public health problem it is today," R. H. Runde, M.D., told members of the Oklahoma Tuberculosis Association at the annual conference held in Oklahoma City September 27 and 28. Dr. Runde is medical director of the Peoria, Ill., county sanatorium district, and was guest speaker at the Monday evening dinner. His topic was "Why Hasn't Tuberculosis Been Eradicated?"

Other discussions at the two-day meeting included "Responsibility of Tuberculosis Associations in Support of Official Health Service," by John F. Hackler, M.D., Oklahoma City, and round tables on county and district tuberculosis association, mass x-ray, the Christmas Seal campaign, bond sales, and others.

Principal speaker at the conference luncheon Tuesday was Gerald Curtin, editor of the Watonga Republican, Watonga, Oklahoma. Mr. Curtin addressed the group on "The Role of Newspapers in the Crusade to Eradicate Tuberculosis."

VETERANS DEPARTMENT ASKS ASSISTANCE

The State Veterans Department of Oklahoma, in attempting to insure the dependents of deceased veterans that they will receive benefits to which they may be legally entitled, has established a plan of reviewing the death certificates filed each month with the bureau of vital statistics. In order that the review may serve the purpose for which it is intended the cooperation of every physician in the state has been requested.

Particular attention is called to the space on the death certificate requesting information about military service which may have been performed by the deceased. The efforts of every physician in providing as complete information as is available in this space will be a service to the widow and children of deceased veterans who are entitled to various state and federal benefits, it was said.

EVERETT NAMED AMBASSADOR

Mark R. Everett, Ph.D., dean of the University of Oklahoma School of Medicine, was named Ambassador of Pennsylvania and was honored during Pennsylvania Week, September 26 to October 2.

Dr. Everett was one of 22 former Pennsylvanians who were selected as ambassadors because they have become well known throughout their state and nation. Among the others were George C. Marshall, Jimmy Stewart, Ham Fisher, Steve O'Neill, Gen. Hap Arnold and James A. Lioen, III. Dr. Everett was honored at a banquet September 29 at his former home town of Slatoustown where he was presented a scroll and other tokens of esteem as Ambassador of Pennsylvania.

A.C.P. MEETING WELL ATTENDED

Thirty-eight fellows from Oklahoma and nine visiting fellows of the American College of Physicians attended the regional meeting of the group held in Tulsa September 25, according to Wann Langston, M.D., Oklahoma City, governor for the Oklahoma district.

Governors of the A.C.P. from Kansas, Arkansas and Texas were also present and 11 associate members from Oklahoma and one visiting associate attended the meeting. Among the group registered were 59 non-college guests, several of whom have applications pending. Mark R. Everett, Ph.D., dean of the University of Oklahoma School of Medicine and Dr. Roberts, dean of the Arkansas University School of Medicine, also attended the meeting.

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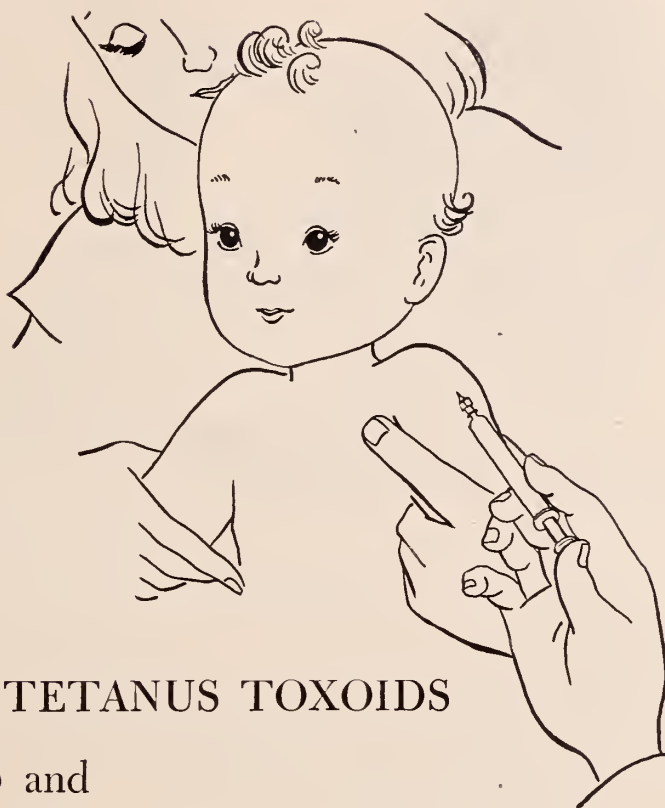
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Floyd Simon, M.D., and Ralph Simon, M.D., announce the opening of their offices at 615½ Frisco Ave., Clinton.

Philip G. Tullius, M.D., announces the opening of offices at 1223 North Walker St., Oklahoma City.

E. C. Keyes, M.D., formerly of Pawhuska, has now moved to Maysville where he will practice.

O. W. Starr's, M.D., sale of palomino and quarter horses was one of the added attractions at the Drumright district fair.

Neeson Rolle, M.D., formerly of Taloga, has opened offices in Seiling, Okla.

Port Johnson, M.D., Muskogee, is one of the chairmen of the health committee of the Muskogee Council of Parents and Teachers.

Henry G. Ryan, M.D., University of Oklahoma graduate, is now practicing at Healdton, Okla.

D. W. Darwin, M.D., formerly of Woodward, has now opened his offices at 3485 South Broadway, Englewood, Colo.

Thomas Dobbins, M.D., Custer county health officer, has announced that an examining clinic for crippled children and other persons interested in vocational rehabilitation is scheduled there.

Approximately 30 Oklahoma leaders in mental health met in September in the Eastern Oklahoma Hospital at Vinita to hear a discussion of problems common to all state mental hospitals. F. M. Adams, M.D., superintendent of the Vinita hospital, and other physicians on the staff there were in charge of the program.

Lewis J. Moorman, M.D., and C. R. Rountree, M.D., Oklahoma City, are co-chairmen in the drive among state physicians to complete raising of \$1 million for the Oklahoma Medical Research Foundation.

Van Parmley, M.D., and Mrs. Parmley, Mangum, have been named parents of the Mangum highschool senior class.

Mark D. Holcomb, M.D., Enid, recently discussed plans for the mass tuberculosis survey in Garfield county at a meeting of the Exchange club.

M. L. Peter, M.D., Okmulgee county health department head, has been named Oklahoma representative of the governing council of the southern branch of the American Public Health Association. It covers 12 states.

D. G. Divine, M.D., has closed his offices in Wagoner to assume the position of district health officer of the Oklahoma State Health Department.

J. G. Binkley, M.D., Oklahoma City, has accepted an appointment as part-time assistant health director with Walter H. Miles, M.D., with offices in the Municipal building, Oklahoma City. Dr. Binkley is professor emeritus in obstetrics at the University of Oklahoma School of Medicine.

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MEDICAL SOCIETIES AROUND THE STATE

Garfield County

The September meeting of the Garfield county medical society was a dinner business meeting held at the Hotel Youngblood. No program was planned because of the postgraduate course scheduled for the same night.

Pottawatomie County

Horton E. Hughes, M.D., spoke on "The Surgical Treatment of Diseases of the Prostate" at the September meeting of the Pottawatomie County medical society. C. W. Haygood, M.D., led the discussion.

Oklahoma County

First fall meeting of the Oklahoma County medical society was held September 28 with the program title "Rehabilitation of the Physically and Mentally Handicapped." A color and sound film was presented and Moorman Prosser, M.D., spoke on "Psychiatric Problems in Vocational Rehabilitation."

Kay-Noble

N. H. Cooper, M.D., new director of the Kay county health department, was presented to members of that society at their September meeting. A report on the meeting of the National Physicians Committee in Chicago was given by C. E. Northcutt, M.D., Ponca City, O.S.M.A. president. Dr. Northcutt also presented a past president's certificate to A. S. Risser, M.D., Blackwell. "Cancer of the Colon and Surgical Procedures" was the subject discussed during the scientific part of the program. Guest speaker was W. P. Callahan, M.D., Wichita.

The number of living veterans on Veterans Administration disability compensation and pension rolls has decreased steadily in the past year.

Choctaw, McCurtain, Pushmataha

Druggists from Choctaw, McCurtain and Pushmataha counties were guests of the Tri-County medical society at a meeting in Broken Bow, September 14. E. R. (Pete) Weaver, Stillwater, secretary of the Oklahoma Pharmaceutical association and state drug inspector, was guest speaker.

Payne-Pawnee

C. E. Northcutt, M.D., President of the O.S.M.A., and Dick Graham, executive secretary, spoke on various matters of legislation pertinent to the medical profession at a recent meeting of the Payne-Pawnee county medical society. Twenty-two physicians from Stillwater, Pawnee and Cushing were present.

Comanche County

Physical restoration services offered through the vocational rehabilitation program were outlined for members of the Comanche county medical society by Miss Mabel Sine, Oklahoma City, supervisor of physical restoration for the state vocational rehabilitation program. A colored film was also shown.

Creek County

C. B. Reese, M.D., Sapulpa, was presented a life certificate in the Oklahoma State Medical Association at a meeting of the Creek County medical society. Presentation was made by O. H. Cowart, M.D., Bristow.

Carter County

The Carter county medical society went on record as approving the principals of the Blue Cross and Blue Shield plans at the September meeting of the society. Redistricting was also discussed.

GYNECOLOGY CIRCUIT CLOSING SOON

Dr. J. R. Bromwell Branch is now teaching his last circuit of the two-year postgraduate course in gynecology. The lectures are being given in the nurse's classroom, Western Oklahoma State Hospital, Clinton, each Tuesday night, Watonga clinic, Watonga, Wednesday nights, El Reno Sanitarium dining room, El Reno, Thursday nights, physician's staff room in the Benedictine Heights Hospital, Guthrie, Friday nights, and the Edwards Memorial Hospital for the colored physicians of Oklahoma City on Monday nights.

The course in gynecology has been an outstanding success and the attendance has been excellent, the O.S.M.A. postgraduate committee reports. The committee is now seeking a competent instructor for the proposed course in internal medicine. Approximately 100 colleges, medical schools, clinics, etc., throughout the U. S. have been contacted and it is hoped that the announcement that they have found an instructor for this position can be made soon.

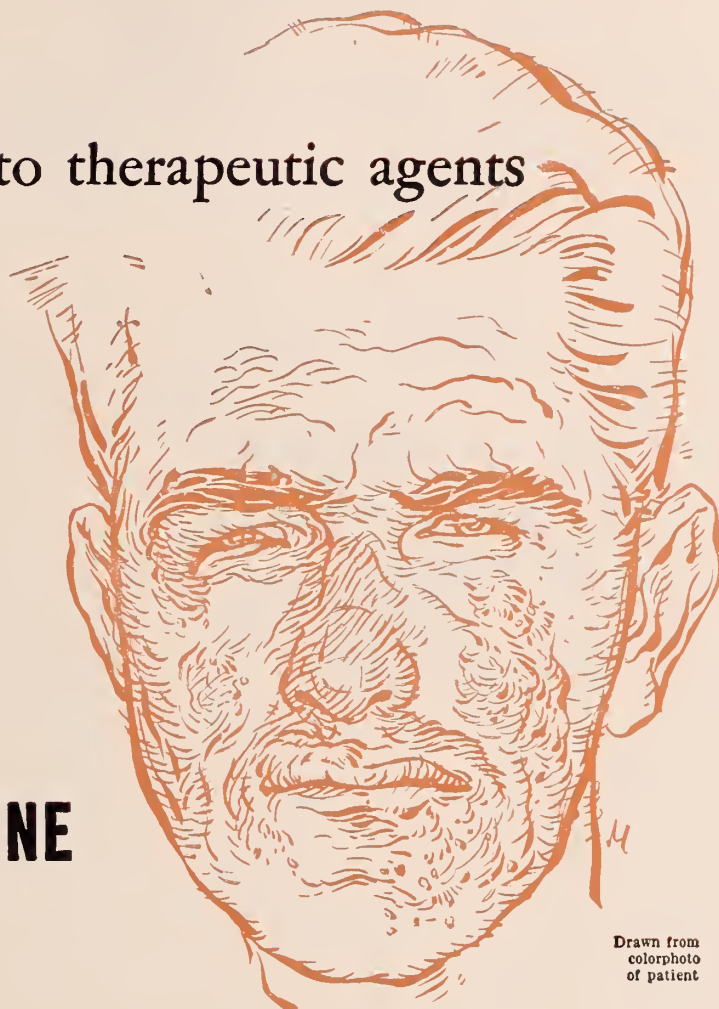
The internal medicine course is scheduled for 1949-50. When announcement letters are sent to the members of the association, physicians are urged to mail enrollments promptly to the state office. It seems incongruous to the committee that it is necessary to send out representatives from the executive office to do the enrolling for these courses. If each physician will cooperate by mailing his enrollment, this will eliminate extra expense and help in making these programs become self-supporting.

The continuous interest in the postgraduate instruction in our state is gratifying, the committee emphasized. Many comments from the physicians taking the course are in line with the following: "I am very much pleased with this type of postgraduate work. I find it difficult to go away for days or weeks to take some work which I feel I need badly. Consequently, this type of course is about my only opportunity. I wish it were possible to have two such courses each year."

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MEDICAL ABSTRACTS

UEBER ERBRECHEN NACH TONSILLECTOMIE (Vomiting After Tonsillectomy). Laszlo Kolezar. *Monatschrift fur Ohrenheilkunde und Laryngo-Rhinologie*. Wien. 82:309-314 (July) 1948.

There are a number of patients who complain of nausea and vomiting after tonsillectomy. Their complaint may last for several days, and the continuous vomiting may lead to postoperative bleeding. If the patient vomits one has to examine the operative wound to see whether a beginning hemorrhage is the cause of nausea. Vomiting a few hours after operation may be caused by presence of blood in the stomach which flowed there during the operation. In such a case the vomited blood is dark red or black, and the vomiting is usually not repeated.

If the inspection of the wound does not reveal anything unusual, the vomiting may be the result of preliminary medication or a postoperative acidosis. Ten cc. of a 10 per cent glucose solution, together with 20 units of insulin may cure such postoperative acidosis. Of course, one should remember that a shift in the acid base equilibrium of the body may be just a general chemical reaction of the organism as fever is a general physical reaction and leukocytosis is a general cellular reaction.

Under normal conditions the reaction of the blood is stable owing to the buffer substances produced by the various organs. In acidosis the production or the availability of such buffer substances is lowered. In an injured tissue the chemical reaction becomes acid, and the grade of acidosis depends upon the presence of inflammatory reactions and upon the type of infection. The locally produced excess acid is excreted by the kidneys in the urine. Postoperative acidosis may become as serious as diabetic acidosis, and it may lead to coma. Symptoms of severe acidosis are continuous, severe vomiting, fever, rapid pulse, occasionally coma; the urine always contains acetone bodies. The pH of the urine is strongly on the acid side.

Considering the general pathology of acidosis it is very probable that in certain persons who show vomiting after tonsillectomy the liver is also damaged either by the premedication or by the toxins of tonsillitis. It is also possible that the customary one-day fasting before the operation predisposes the organism to postoperative acidosis.

In a series of 200 tonsillectomies the author observed 15 cases with postoperative acidosis and vomiting. In all cases the administration of 10 cc. of a 10 per cent glucose solution with 20 units of insulin completely stopped nausea and vomiting.

Even in tonsillar abscess the author performs tonsillectomy *chaud*, injecting a two per cent novocain solution into the site of operation. He did not observe any complication after this procedure. The tonsil of the seemingly healthy side is also excised, in many cases revealing a beginning or a latent abscess.—Marvin D. Henley, M.D.

CARCINOMA OF THE LIP. James E. Cross, Eugene Guralnick and Ernest M. Daland. *S.G.&O.*, 87:2:153-163 (August) 1948.

"Carcinoma of the lip, one of the most malignant neoplasms of the oral cavity, is one of the most readily curable malignancies encountered in the body. Because of the prominent location it is usually brought to the attention of the patient at an early stage and, therefore, should be seen by the physician while still amenable to treatment. This study was undertaken in an effort to evaluate the results of treatment of all patients with carcinoma of the lip either seen in the out-patient clinic or admitted to the Pondville hospital from the time of its establishment in June, 1927, to December, 1941. This particular period of time was chosen in order to have a complete five year follow-up record on all the patients who received treatment.

"The records of 563 patients with carcinoma of the lip constituted the series for review and consideration. These cases were 2.9 per cent of the 19,664 new patients examined in the out-patient department during the period covered by the study.

"It was hoped that by a critical study of a relatively large series of cases certain criteria could be established from which it would be possible to outline the method of therapy most likely to be successful in a given case and to give a reasonably accurate prognosis at the outset of treatment.

CONCLUSIONS

"1. Carcinoma of the lip is the most readily curable malignant tumor of the oral cavity, and treatment of 407 unselected cases at the Pondville hospital resulted in 67.1 per cent three year cures. Of the patients who received all their treatment at Pondville 81.4 per cent achieved three year cure status.

"2. Surgery is the preferred method of treatment at the Pondville hospital.

"3. Three year cures are as significant statistically as five year cures in carcinoma of the lip.

"4. Carcinomas of the labial commissures are approximately twice as difficult to control as lesions in other locations on the lips.

"5. Curability of carcinoma of the lip is directly related to the size and pathological grade of the primary tumor and the presence (or absence) of lymph node metastases.

"6. It was found that 35.9 per cent of the patients who underwent neck dissection, with pathological proved cervical lymph node metastases, attained the three year cure stage.

This informative article is abstracted and presented for study because it shows concretely what can be done for carcinoma of the lip. Secondly it emphasizes the importance of early diagnosis and the institution of the proper treatment. Thirdly it proves the value of good follow-up examinations of all carcinoma patients.—John F. Burton, M.D.



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MEDICAL ABSTRACTS (Continued)

SNORING. The Journal of Laryngology and Otology. Ian G. Robin. London. 62:540-543 (August) 1948.

Snoring is a seemingly trivial matter, yet it may ruin an otherwise happy marriage; it is even a basis for divorce in some parts of the U.S.A. The problem of snoring has been studied by anatomists and orthodontists.

Though noisy respiration may be produced by various structures in the respiratory tract, the term snoring should be limited to sounds made by vibrations in the soft palate and posterior faucial pillars during sleep. Snoring is usually produced during inspiration through the mouth, sometimes by ordinary breathing through the nose. It is an involuntary act.

Pharyngoscopic observations showed that in a snore the thin edge or velum of the posterior faucial pillars is the vibrating part. In order to bring about such a vibration it is necessary that the reservoir air in the nasopharynx be at a low ebb; that a special position be reached in the relationship of tongue and soft palate; also that the texture of the velum and the thickness of the tissues be of a special kind. The pitch of snore depends on density, elasticity and size of the vibrating part.

The soft palate must be free to vibrate. A short *ramus mandibulae*, therefore, predisposes to snoring because it makes the palate lie away from the dorsum of the tongue. Certain sleeping positions also predispose to snoring because they determine the position of the tongue in relation to the palate. Sleeping on one's back causes the tongue to fall back so that it approaches the velum of the fauces and snoring may result. Presence or absence of teeth has little influence on the production of a snore. Certain types of dental orthodontic splints can mold the dental alveolar pattern and can lead to less mouth-breathing.

The tone of the glossopharyngeal musculature is a decisive factor in snoring. It influences positioning and elasticity of the parts. It is told that the pharyngeal muscular behavior is a pattern governed by the central nervous system and inherited by birth. Thus, snoring would be one of the hereditary predispositions. Those who want to be modern in their explanations of snoring assert that during sleep there is a fall in suprenal secretion; this leads to a rise in parasympathetic over

sympathetic action, and therefore a diminution of tone in the palatal structures.

In anesthetized patients sounds just like snoring are also heard, though there are many who state that this is not real snoring. Even man-apes will snore during anesthesia. These sounds during anesthesia can be explained by relaxation of the glossopharyngeal musculature.

Other factors in snoring may be too numerous such as slight edema of the palatal mucosa, slight pharyngitis due to working indoors or resulting from smoking, obesity, plethora, allergy. Any granulomatous condition in the pharynx may lead to snoring. Other causes may be: (1) nasal obstructions, e.g., septal deflection, collapsed alae nasi, moderate mucosal congestion; (2) pathological changes in the pharynx; and (3) functional derangements of the central reflex governing the tone of glossopharyngeal musculature.

What to do with a snoring person? Amputation of the uvula is no relief. Removal or prevention of nasal obstruction may be beneficial. A person may be prevented from sleeping on his back by sewing a cotton reel into the back of his pajamas, etc. Timely removal of enlarged tonsils and adenoids is the best measure to reduce the number of potential snorers.—Marvin D. Henley, M.D.

DO YOU KNOW?

That at least two O.S.M.A. members make calls to rural areas in their private planes? Information gained in a survey conducted by the Oklahoma Aviation Commission revealed that O. C. Newman, M.D., Shattuck, and W. E. Seba, M.D., Leedey, make calls in their own planes. Several other O.S.M.A. members are known to be "physician pilots" but Dr. Seba and Dr. Newman are the only ones known to make calls via airplane. Should *your* name be added to the list? If so, please let us know as the Aviation Commission and the Executive Office would like to have a complete "fliers' file."

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OFFICERS OF COUNTY SOCIETIES, 1948

COUNTY	PRESIDENT	SECRETARY	MEETING TIME
Alfalfa.....	L. T. Lancaster, Cherokee	C. E. Cook, Cherokee	Last Tues. each Second Month
Atoka-Bryan-Coal- Johnston.....	Charles D. Dale, Atoka	A. T. Baker, Durant	Second Tuesday
Beckham.....	T. J. McGrath, Sayre	J. B. McGolrick, Erick	Third Thursday
Blaine.....	Fred Perry, Okeene	Virginia Curtin, Watonga	Third Thursday
Caddo.....	Joseph Henke, Hydro	Edward T. Cook, Jr., Anadarko	Subject to Call
Canadian.....	J. N. Goldberger, El Reno	Jack W. Myers, El Reno	Second Tuesday
Carter.....	C. D. Cunningham, Ardmore	Roger Reid, Ardmore	First Tuesday
Cherokee.....	P. H. Medearis, Tahlequah	R. K. McIntosh, Jr., Tahlequah	
Choctaw-McCurtain- Pushmataha.....		Fred D. Switzer, Hugo	Fourth Thursday
Cleveland.....	Phil Haddock, Norman	James F. Hohl, Norman	Second Tuesday
Comanche.....	Byron W. Aycock, Lawton	E. Stanley Berger, Lawton	Third Friday
Cotton.....	G. W. Baker, Walters	Mollie Scism, Walters	
Craig.....	C. P. Chumley, Vinita	J. M. McMillan, Vinita	Second Tuesday
Creek.....	P. K. Lewis, Sapulpa	Louis A. Martin, Sapulpa	Third Thursday
Custer.....	J. G. Wood, Weatherford	Roscoe C. Baker, Enid	Fourth Thursday
Garfield.....	J. Wendell Mercer, Enid	John R. Callaway, Pauls Valley	Wed. before 3rd Thur.
Garvin.....	Carl Steen, Pauls Valley	F. P. Robinson, Pond Creek	
Grant.....	I. V. Hardy, Medford	Wesley W. Davis, Chickasha	
Grady.....	L. E. Woods, Chickasha	J. B. Hollis, Mangum	
Greer.....	Fred Sellers, Mangum	C. N. Talley, Hollis	First Wednesday
Harmon.....	R. H. Lynch, Hollis	N. K. William, McCurtain	
Haskell.....	William S. Carson, Keota	Paul Kernek, Holdenville	First Friday
Hughes.....	L. A. S. Johnston, Holdenville	J. Harold Abernathy, Altus	Last Monday
Jackson.....	J. M. Allgood, Altus	O. J. Hagg, Waurika	Second Monday
Jefferson.....	H. A. Rosier, Waurika	E. C. Mohler, Ponca City	Second Thursday
Kay-Noble.....	Glenn Kreger, Tonkawa	Henry C. Trzaska, Hennessey	
Kingfisher.....	H. Violet Sturgeon, Hennessey	J. B. Tolbert, Mt. View	
Kiowa.....	R. F. Shriner, Hobart	Rush L. Wright, Poteau	
LeFlore.....	John H. Harvey, Heavener	C. W. Robertson, Chandler	First Wednesday
Lincoln.....	Jack Mileham, Chandler	J. L. Lehew, Guthrie	Last Tuesday
Logan.....	E. W. Lehev, Guthrie	Paul B. Cameron, Pryor	
Mayes.....	E. H. Werling, Pryor	W. C. McCurdy, Jr., Purcell	
McClain.....	I. N. Kolb, Blanchard	W. A. Tolleson, Eufaula	Third Thursday
McIntosh.....	J. Howard Baker, Jr., Eufaula		
Muskogee-Sequoyah- Wagoner.....	George L. Kaiser, Muskogee	Eugene M. Henry, Muskogee	First Tuesday
Northwestern.....	Joe L. Duer, Woodward	C. W. Tedrowe, Woodward	2nd Thurs. Even Mo.
Okfuskee.....	A. S. Melton, Okemah	M. L. Whitney, Okemah	
Oklahoma.....	W. W. Rucks, Jr., Oklahoma City	John F. Kuhn, Oklahoma City	Fourth Tuesday
		Mrs. Muriel Waller, Exec. Secty.	
Okmulgee.....	J. C. Matheney, Okmulgee	S. B. Leslie, Jr., Okmulgee	Second Monday
Osage.....	C. S. Stotts, Pawhuska	William A. Loy, Pawhuska	Third Thursday
Ottawa.....	F. L. Wormington, Miami	W. Jackson Sayles, Miami	Second Thursday
Payne-Pawnee.....	Clifford M. Bassett, Cushing	C. W. Moore, Stillwater	Third Friday
Pittsburg.....	Homer C. Wheeler, McAlester	Edward D. Greenberger, McAlester	First Wednesday
Pontotoc-Murray.....	W. T. Gill, Ada	Ollie McBride, Ada	1st and 3rd Wed.
Pottawatomie.....	Jack W. Baxter, Shawnee	F. C. Gallaher, Shawnee	Third Wednesday
Rogers.....	P. S. Anderson, Claremore	M. E. Gordon, Claremore	
Seminole.....	Claude Chambers, Seminole	Mack I. Shanholtz, Wewoka	Third Wednesday
Stephens.....	Fred Patterson, Duncan	W. R. Cheatwood, Duncan	Third Wednesday
Texas.....		E. L. Buford, Guymon	
Tillman.....	G. A. Tallant, Frederick	O. G. Bacon, Frederick	Second and Fourth Monday
Tulsa.....	Victor K. Allen, Tulsa Medical Arts Bldg.	John G. Matt, Tulsa	
Washington Nowata.....	L. B. Word, Bartlesville	Mr. Jack Spears, Exec. Secty.	
Washita.....	A. H. Bungardt, Cordell	C. L. Johnson, Jr., Bartlesville	Second Wednesday
Woods.....	R. A. Whiteneck, Waynoka	Aubrey E. Stovers, Sentinel	Last Tuesday
		W. F. LaFon, Alva	Odd Months

COUNCILORS AND VICE-COUNCILORS

COUNCILORS AND VICE-COUNCILORS

District No. 1: Alfalfa, Beaver, Cimarron, Dewey, Ellis, Harper, Texas, Woods, Woodward—Daniel B. Ensor, M.D., Hopeton (C) 1950; O. C. Newman, M.D., Shattuck (V-C) 1950.

District No. 2: Beckham, Custer, Greer, Harmon, Jackson, Kiowa, Roger Mills, Tillman, Washita—L. G. Livingston, M.D., Cordell (C) 1951; O. C. Standifer, M.D., Elk City (V-C) 1951.

District No. 3: Garfield, Grant, Kay, Noble, Pawnee, Payne, Major—Bruce Hinson, M.D., Enid (C) 1949; R. W. Choice, M.D., Wakita (V-C) 1949.

District No. 4: Blaine, Canadian, Cleveland, Kingfisher, Logan, Oklahoma—Carroll Pounders, M.D., Oklahoma City (C) 1950; Joe Phelps, M.D., El Reno (V-C) 1950.

District No. 5: Caddo, Carter, Comanche, Cotton, Grady, Jefferson, Love, Stephens—J. Hobson Veazey, M.D., Ardmore (C) 1951; O. J. Hagg, M.D., Waurika (V-C) 1951.

District No. 6: Creek, Nowata, Osage, Rogers, Tulsa, Washington—Ralph McGill, M.D., Tulsa (C) 1949; P. S. Anderson, M.D., Claremore (V-C) 1951.

District No. 7: Garvin, Hughes, Lincoln, McClain, Murray, Okfuskee, Pontotoc, Pottawatomie, Seminole—Clinton Gallaher, M.D., Shawnee (C) 1950; Ned Burleson, M.D., Prague (V-C) 1950.

District No. 8: Adair, Cherokee, Craig, Delaware, Mayes, Muskogee, Okmulgee, Ottawa, Sequoyah, Wagoner—Shade Neely, M.D., Muskogee (C) 1951; W. J. Sayles, M.D., Miami (V-C) 1951.

District No. 9: Haskell, Latimer, LeFlore, McIntosh, Pittsburg—Earl Woodson, M.D., Poteau (C) 1949; E. H. Shuller, M.D., McAlester (V-C) 1949.

District No. 10: Atoka, Bryan, Choctaw, Coal, Johnston, Marshall, McCurtain, Pushmataha—W. K. Haynie, M.D., Durant (C) 1950; W. W. Cotton, M.D., Atoka (V-C) 1950.

THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

NO APOLOGY FOR LIVING PLEASE

Every physician should read Norman Cousins' ¹ "An Apology for Living" and be thankful that fate has placed him in a position to serve, come war or peace, poverty or prosperity. Always there is birth, love, life, suffering, strife, disease and death. Mr. Cousins' story strikes to the quick like the sting of a scorpion. He suddenly assails the reader with all the serious elements of human existence and reveals the enormity of human depravity. All this comes about because of his assignment on a citizens committee to "examine and make recommendations relating to German democratization in general and civil liberties in particular." But it was his survey of camps for displaced persons in the Frankfurt military post area that inspired the story and his interview with the D.P. Dr. Lomask, who had suffered all the impoverishing losses man could endure, that should interest all physicians. After discussing Dr. Lomask's normal life before the war and his life of bitterness after the struggle was over, Mr. Cousins reports the following conversation:

"I asked Dr. Lomask whether he thought the other D.P.'s at Bad Nauheim—or, for that matter, D.P.'s throughout Germany—were similarly able to create new life in and around themselves, or whether they were living out the fierce nihilism of the concentration camps.

"'I am not sure,' he said, 'but I think maybe I have been lucky because I am a doctor. You see, a man wants to feel he is needed in the world. He wants people to come to him and say, 'Please help me, I am in trouble. I need your advice,' or 'You can do this so very well, won't you give me a hand?' And it is good medicine. Wounds of the mind need medicine like that.'"

The reader who thinks this is a long way around Robinhood's barn will please bear in mind the fact that good medicine is all bound up with human relations and homely philosophy engendering an affection founded upon affliction.

THE CHRISTMAS SEAL SALE

One hundred years ago Edward Livingston Trudeau was born. Seventy-five years ago he retired to the Adirondacks, as he thought, to die of tuberculosis contracted from his brother whom he nursed to his death without the aid of the light which later dawned upon him with an effulgence which blessed the world. Sixty-four years ago under the influence of this light he built the two bed "Little Red" at Saranac Lake, New York where his first sanatorium patients successfully chased the cure.

Forty-four years ago the National Tuberculosis Association was organized chiefly for the dissemination of this light through health education. Forty-three years ago the American Sanatorium Association was formed for the purpose of bringing this healing light to the individual patient. Later the Christmas Seal was designed in order that all people might participate in an effort to make the light universal. Please help it shine by publicizing, purchasing, and posting these little health seeking seals.

MEAT FOR THE NEXT ADMINISTRATION

According to responses from a Medical Economics questionnaire reported by the Editor of this publication, the responses, indicate that of 4,864 physicians responding, only 15 percent would participate in a government Wagner-Murray-Dingell Medical Service. Twenty-four percent were undecided, and 61 percent said "No."

It is the writer's opinion that the 61 percent voting 'No' would be a perfectly safe percentage estimate for the 135,000 physicians in private practice. This would figure 83,000 "No's" as against 20,000 who are willing and ready and 32,000 who are uncertain. The total being 52,000.

In a gesture of generosity, we will allow President Truman and Oscar Ewing 52,000 for the initiation of the ten year prescription. The physicians now working for Mr. Ewing on Civil Service are on a five day, 40 hour a week schedule. Wasting a little lead

¹. Saturday Review of Literature, 31:41:9 (October 9) 1948.

to work this into figures will show the necessity of 156,000 physicians working on eight hour shifts to take care of five days. Provisions must be made for the two extra days in each week on eight hour shifts.

Among administration policy makers, it is agreed that there are not enough doctors and not enough coverage. If the 10 year prescription were to be championed by all the physicians in the United States on a five day, 40 hour basis, it would require 50 years on an accelerated plan to educate enough physicians to start the wheels rolling and make it click with the clock.

How easy it is for a Doctor not to work and not to think on a Civil Service Time Table. God help the people!

INTESTINAL OBSTRUCTION WITH INTERNATIONAL ASPECTS

Independent of the law, without treaty or statute, medicine is welcomed throughout the world. It requires only the cooperation of the patient and physician and the approval of God. In war or peace, if need be, it strikes across international lines staying the hand of death, and bringing comfort and peace of mind.

In the summer of 1947 at the Sage Memorial Hospital, Presbyterian Mission, Ganado, Arizona, while the Navajo clinical conference (an annual event with a record of eight years) was in session, featuring medical experts from the Atlantic to the Pacific, an interesting drama took the stage. Shortly before Dr. Philip Thorek of Chicago was to lecture on "Intestinal Obstruction," the Navajo wife of a sheepherder on the reservation, Mrs. Nedezbah (crossing a warpath) Lynch fell sick of a pain in her "belly." Over rough roads she reached the hospital in time to make the lecture a clinical demonstration as her native husband stood stoically by in immaculate cap and gown with his Indian eyes shining above the mask that hid his ancient face. As Dr. Thorek operated for intestinal obstruction in that well-equipped operating room on the desert, the assembly was strangely international. Thorek was Jewish, Salsbury Canadian born, the surgical assistant was Chinese and the anesthetist a native of Chile. Two Chinese doctors studying at Ganado were present and the surgical supervisor was a Hopi Indian. Among other nurses present were the following: a Navajo, a Shoshone, a Spanish American and a Santo Domingan. Though the government is committed to the task of supplying medi-

cal care to the Navajo-Hopi Indians, the church is free to bring medicine to the desert in many tongues.

SHALL WE WAIT?

There is one positive solution of the threat of socialization of medicine in the United States.

This solution is that the American Medical Association tells the people of this country and the legislators, that we, their physicians, are going to pay, or not pay, but that we are so organized that we will refuse to work under any scheme of socialized medicine that may be foisted upon us.

The A.M.A. does not have any such plan that has been transmitted to the profession and this should be done.

There are other organizations that have attempted to take over this plan. The Association of American Physicians and Surgeons, and the National Physicians Committee favor an intelligent public relations policy based upon fair treatment of patients, voluntary prepaid health insurance when approved by the physicians, and most important, non-cooperation with any form of political control of medical practice.

We should take our warning from the recent debacle in the British Medical Association which resulted in the complete socialization of medicine in the British Isles. A few months ago a majority voted a policy of non-participation, but were not sufficiently organized to prevent a later official reversal of policy when government pressure was applied.

The clouds of socialized medicine are gathering and are becoming more ominous and if organized medicine does not take active steps NOW our fate will be identical to the BMA due to lethargy and inaction!

ANNUAL MEETING OKLAHOMA STATE MEDICAL ASSOCIATION

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SCIENTIFIC ARTICLES

REPAIRING THE SADDLE NOSE*

O. ALTON WATSON, M.D.

OKLAHOMA CITY, OKLAHOMA

The saddle nose deformity is one characterized by an abnormally concave dorsum. The condition may be congenital or acquired. If acquired, it may be the result of trauma or of infection, such as septal abscess, tuberculosis or syphilis, which weaken or resorb the support of the nose. Either the osseous or cartilaginous portion of the bridge may be involved separately, though in severe deformities of this type, both are usually affected. A true saddle nose may be corrected only by replacing tissue into the concavity. Many different materials have been used for this purpose including:

1. *The alloplastic substances*—paraffin, ivory, and more lately tantalum, vitalum and the acrylic compounds.
2. *Isografts*—ie., preserved cartilage and bone.
3. *Autogenous grafts* of bone, cartilage, dermis—either adjacent or distant in origin.

Before considering the most acceptable methods of reducing a concave deformity, it might be well to briefly review the anatomy of the supporting structures of the nose.

The architecture of the nose is based on the position and interrelationship of the cartilaginous and bony components. There are three principle cartilages, the first single and the others paired. 1. the septal or quadrangular, 2. the upper lateral, (3) the alar. They are joined together and to the nasal bones by a dense fibrous attachment. The paired nasal bones, the perpendicular plate of the ethmoid and the vomer, form the rigid support of the nose. One may note in the diagram, a small space between the upper lateral and the alar cartilages where only the septum preserves the dorsal level. This explains the occasional small, but noticeable, saddle defect noted after a too extensive, submucous resection of the septum, or after a fairly minimum septal abscess.

TREATMENT

A small concavity on the dorsum of the nose with otherwise normal structure is easy to repair and the results are gratifying to the patient and doctor as well. One of several methods may be chosen. A small piece of preserved hyaline rib or septal cartilage can be readily inserted into a pocket made intra-nasally at the site of the defect. One



Diagram a.

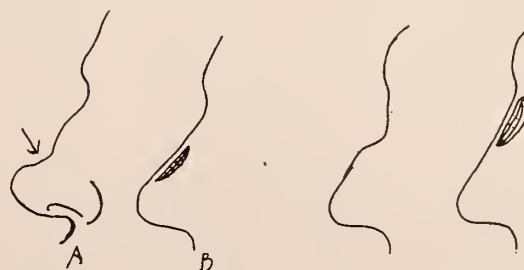


Diagram b.

Figure 1

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association, May 17, 1948.

or two mattress sutures through the skin and below the graft, will hold it in place until it becomes fixed. An acrylic mold may be fashioned to fit the defect, and at least to the present time, the reports seem to indicate that it is well tolerated and non-irritating. One objection to this method is that the compound is not malleable, necessitating accurate determination of size and shape before operation. Perhaps the simplest procedure, and the one offering the greatest chance of success, is the use of a piece of septal cartilage or vomer. This material is readily at hand, may be resected at the time and may be used in greater or lesser amounts, depending on the extent of the deformity. Peer¹ has pointed out that two or three thicknesses of cartilage may be sutured together with plain catgut, to obtain greater thickness. A hypertrophied vomer ridge with some cartilage attached, will sometimes make an ideal graft. Fig. 1.—Diagram 1.

A large saddle defect is not so easily reduced as a small one, but the results are equally gratifying if one makes the proper selection of a graft. Rib cartilage, either fresh or preserved, forms sufficient bulk to fill in any defect of the nose but has the disadvantages of occasional curling or of absorption. Furthermore, it does not attach itself firmly to the underlying bony and cartilaginous structure and may be felt and seen as a foreign body beneath the skin. Vitalium or acrylic compounds would also carry the latter objection. Recently there have been a number of reports² dealing with the use of cancellous bone from the iliac crest. They have been uniformly favorable, most observers feeling that the comparative ease of obtaining and shaping the graft, its resistance to infection and the fact that it becomes an integral part of the bony structure of the nose, recommends its use in any severe saddle nose. I have personally used it in five patients and so far have had no reason to regret its choice.

METHOD

General anesthetic has been used in all cases. An orthopedic surgeon is asked to remove a piece of cancellous bone from the iliac crest. After exposing the ilium, he shaves off, with a chisel, the cortex along the anterior border, then removes a block of cancellous bone approximately four cm. long and one cm. thick. The wound is closed in the usual manner.

The block of bone is easily shaped with chisel and rongeur to the size desired. It is then placed into a subperiosteal pocket which has been prepared while the bone was being obtained. Incision is ordinarily between the alar cartilages and the skin but may be made between the upper lateral and the alar cartilages if the deformity is above this level. Some care must be exercised not to insert such a large graft, that ischemia and necrosis will result. If the skin over the nose is properly undermined, this will not happen.

The nose is packed lightly anteriorly, and a wax mold is used externally for four or five days.

After the graft is in place, vascularization, decalcification, and laying down of new bone soon starts so that by the end of six months the outer surfaces of the graft begins to assume a cortical appearance (2). Even after 20 days the graft is quite firmly in place and would require considerable force to displace it. Penicillin is used routinely for 48 hours.

Fig. 2 N. D. W., (21 Years)

This patient was seen on July 6, 1945 at the age of 18 years. He had been in an automobile wreck two months before. Note that there is a marked lateral deformity as well as a depression of the bridge. The nose was straightened, a submucous resection done, and the material used to build up the bridge. The picture shows an acceptable result, the nose straight and within normal limits as to height. However, this had been a compound fracture and infection developed with subsequent absorption of the graft. The nose was still straight but definitely concave. The patient was inducted into the army for two years but after his return, he was re-operated on August 19, 1947 and a bone graft placed in the defect. The last photographs were taken about 10 months later.

Miss E. J. W. (age 16 yrs.)

Crushing injury to the nose in 1943. Front photographic view shows the flatness and widening of the bridge, while the profile demonstrates the marked lowering of the bridge.

(Since the paper was written, this patient was operated. The post-operative photographs were taken approximately one month after surgery.)



Fig. 2



Fig. 3

There have been no infections in my small series of cases, and no graft has been extruded or absorbed.

I have illustrations of three other patients, two of whom have been operated and

one who is scheduled for operation next month.

BIRLIOGRAPHY

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2. Bruce C. Martin—Cancellous Bone Grafts for Restoration of Nasal Contour. Plastic & Reconstructive Surgery—(March) 1948.

MEDICAL SOCIETIES AROUND THE STATE

STEPHENS COUNTY

Three new members were accepted at the September meeting of the Stephens County Medical Society. They are J. L. Patterson, jr., M.D., Richard Ellis, M.D. and Ira T. Bond, M.D.

KAY-NOBLE

For the first time since before the war, a joint meeting was held for members of the medical, dental, pharmaceutical, and law professions. The Kay-Noble county medical society acted as hosts at the meeting which was held at the Ponca City Country Club.

LINCOLN COUNTY

The Lincoln County Medical Society met October 7

in Chandler with members of the personnel of the Mobile Cancer Detection clinic also attending. Round table discussion concerning cancer was held following the dinner.

WASHINGTON-NOWATA

Approximately 60 physicians and their wives attended the monthly dinner meeting of the Washington-Nowata county medical society in October at Bartlesville. George H. Kimball, M. D., Oklahoma City spoke on "Treatment of Burn and Skin Grafting" and J. P. Torrey, M.D., Bartlesville, was presented a 50 year pin at the meeting. J. V. Athey, M.D., Bartlesville was presented a life membership in O.S.M.A. at the meeting by Everett S. Lain, M.D., Oklahoma City.

BURNS IN CHILDREN*

PAT NAGLE, M.D., F.A.C.S.

OKLAHOMA CITY, OKLA.

In burns of children, we have a special problem. This is particularly true of very young children and infants. It is of these that I shall treat in this brief paper.

As a class, these burns are non fatal and should be treated as such. They are frequently due to a carelessly operated croup kettle, falling on a floor furnace, spilling of breakfast coffee and numerous such minor household tragedies.

The area of scald is usually less than one fourth of the body surface and frequently involves the face, neck, shoulders and forearms. The floor furnace burn is usually of restricted area, but much deeper in extent. It is less of an immediate problem than a scald, but a much more difficult ultimate problem because of the contracture of the waffle iron-like grid marks. Depending upon their location, these may comprise a very difficult plastic problem. The sites of occurrence in order of frequency are the soles of the feet, the palms of the hands, the buttocks and the cheek. A floor furnace burn of the cheek by subsequent contracture will disfigure a baby's face considerably by drawing on the angle of the mouth, the lower lid of the eye, the angle of the nose.

These patients are frequently seen very soon after the accident and are screaming with pain. Parents are distressed and frightened and the first thing that should be done in treatment is to relieve the pain. This should be accomplished by the first physician who sees the patient. The second thing that should be accomplished as soon as possible is to cover over and protect the entire burned surface with a sterile, soft, nontraumatizing dressing. This, too, should be accomplished by the first physician who sees the patient. Once these two things have been accomplished, the haste and hysteria of the emergency is ended and the subsequent and other essential items of treatment may be instituted deliberately and carefully.

The relief of pain may be accomplished in any number of ways and will vary ac-

cording to the preference of the doctor in charge. Codeine may be given in doses appropriate to the age and weight of the child and undoubtedly other drugs are effective in the hands of some. I have never learned to dose codeine consistently and adequately in children ranging from three months to three years of age. A second disadvantage is the length of time it takes for codeine to act. Therefore, it is usually given in safe, small and probably inadequate doses. I have found that consistently satisfactory immediate relief of the stinging pain of the burned area is best accomplished by the generous local application of Benzocain 5 percent in any suitable oily vehicle. In my burn kit that I keep equipped to carry about is a quart bottle of this Benzocain containing preparation.

When the child is first seen, his burns are exposed and studied and the varying degrees of severity appraised and described to the parents. It takes only a minute to point out to the parents an area of blanched white, unblistered skin, the size of the palm of a hand on a child's buttock, for instance, and to tell them this skin is dead and this area will ultimately have to be covered by a skin graft. It is, also, advisable to tell the parents that this dead skin will separate and come away by sloughing over a period of three to six weeks. Thus the parents are realistically advised from the beginning and the doctor avoids the necessity of seemingly apologetic explanations later.

Fortunately, these two primary early requirements may be accomplished at the same time.

Fluffed washed gauze is saturated with the Benzocain mixture and the burned area is entirely covered. No effort is made to debris or clean the burned area in the average case. Blisters are not broken and are not removed. All areas of erythema are covered, as these frequently blister and become second degree burns and become infected, if they are not protected or treated from the beginning. If a burned area is

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association May 18, 1948.

grossly and obviously contaminated, it must then be thoroughly cleansed with a bland soap and sterile saline until it may euphemistically be called a clean surgical wound. In which case a bland ointment is then applied and a thick pressure dressing or fluffed gauze and mechanics waste is fixed in place under moderate compression. This compression is accomplished by elastic roller bandage. This routine is consistent with the technique advocated by Summer Koch. In extensive burns where the ultimate outcome is compromised by considerable contamination, it is wise to literally follow the rigid dictates of Koch's accepted care of the burned areas. Fortunately, this situation does not obtain in the majority of cases of burns in children and the discriminating surgeon may and will avoid the more elaborate therapeutic ritual.

Frequently when first seen, the peak of the pain is passed and the employment of a topically applied anesthetic agent seems unnecessary. A penicillin jelly is employed which is bland and protects the burned surface from painful irritation and trauma by the fluffed gauze dressing which is now put on in a thick layer. The thickness of this fluffed gauze varies from two inches to four inches. Its purpose is manifold. It protects the burned surface from subsequent contamination and infection. It protects and cushions the denuded derma from mechanical trauma. It is absorbent of secretions of the burned surface and if properly applied is porous and ventilates the healing burned surface. It stabilizes the dissipation of body heat over areas that normally require clothing. It immobilizes the healing tissues of the injured member and by mild compression limits lymphatic stasis and limits edema.

This generous incasement of the burned areas with two inches to four inches of washed gauze is conveniently held in place by the use of stockingette of appropriate size. It is usually satisfactory to ensheath the entire extremity and include the digits in a well padded bolus of gauze, all of which is held snugly in shape by two inch stockingette tied sausage-wise at its distal extremity. The proximal end of the stockingette sheath is split in the axilla and carried up over the shoulder or it is sewn to the four inch stockingette incasing the torso.

Application of Stockingette — Helmets, lower extremity and body dressings. In the application of this first dressing one makes every effort to tailor and construct it se-

curely enough to last 14 days. Even so, it is necessary to inspect the dressing every other day for the first week, as the infant will frequently wriggle out of the dressing and contaminate his burn. It is, also, reassuring to know that on the second day when there may be considerable swelling that the dressing is not constrictive at any place and the circulation and respiration are in no way embarrassed.

These dressings are undisturbed for 14 days. If the dressings become deranged they may be removed and replaced. If the stockingette gets soiled it should be covered with fresh stockingette at the initial dressing and remove and discard the exterior one when it is soiled in five or six days. As nearly as possible the initial dressing is left undisturbed.

The general therapeutic measures differ a little bit in these children from the efforts carried out in the treatments of the adult. It is important to note that the large quantities of intravenous fluids employed to correct hemoconcentration in the adult are out of place and dangerous in the case of the infant and child. The ratio is about one to 10 and in the average case I give no intravenous medication, but successfully combat hemoconcentration by the use of cortical hormone of five cm. four times a day subcutaneously and small frequent retention enemas of normal saline. For example: two ounces by rectum every two hours most generally is adequate to prevent hemoconcentration and it does not impose any burden on the cardiovascular system and does not contribute to the subcutaneous edema of the burned area. Fluids are given freely by mouth in addition.

The control of the infection of the burned area is accomplished chiefly by the use of penicillin 30,000 to 50,000 units every three hours subcutaneously. This penicillin is continued for from three to 10 days depending upon the depth of the burn and the region of the body involved. At the end of 14 days the burn is redressed and inspected. If the original burn was first and second degree, it will be healed when the dressing is changed in 14 days. If some of the areas of the burned surface were full thickness in depth they will be necrotic at the end of the 14th day. In this event, it is usually best to await separation of the necrotic skin by the action of phagocytes. The dead skin will come away usually in three to six weeks and its removal may be hastened by ex-

cision with scissors. The area from which the necrotic skin was removed is permitted to granulate and subsequently covered by skin transplant.

In recapitulation; it is very important to relieve immediately the pain experienced by a recently burned infant or small child. Their confidence and gratitude is immediately secured and their co-operation in the future care of their burn much improved. The parents are relieved and the whole atmosphere of haste and hysteria is dissipated. To accomplish this immediate relief of pain, a local application of Benzocain three percent to five percent in a suitable oily vehicle has proven most effective.

The initial layer of gauze that comes into immediate contact with this burned surface is saturated with this Benzocain solution and an overlying layer of fluffed washed gauze is securely fixed in place by the use of Stockingette. A second objective, the protection of the burned surface from infection and trauma is also accomplished.

A third consideration is the control of infection. This is accomplished by adequate doses of penicillin given parenterally.

Last but not least are general constitutional measures. Measures to prevent shock, to prevent and correct hemoconcentration, low plasma proteins, and prophylaxis against tetanus.

Hemoconcentration is the most characteristic physiological perversion seen in burns. Fortunately, in infants and young children with less than one fourth of the body surface scalded, hemoconcentration is easily controlled. By the use of adrenal cortical hormone every four hours for four to six days and the use of retention enemas of two ounces of normal saline every two hours in addition to normal fluid intake by mouth, the use of intravenous fluids is avoided in most cases.

As a safeguard the surgeon should observe the hematocrit readings daily for five days. Here it is well to bear in mind that the normal hematocrit for an infant or small child is below the adult figure and if the hematocrit report on a burned infant is 45, it is to be realized that early but definite hemoconcentration is started and requires hemodilution therapy.

SUPRAPUBIC PROSTATECTOMY*

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Since Fuller¹ enucleated the first prostate suprapubically in 1885 there have been no radical changes in technique, but numerous modifications and refinements. Some have weathered the ravages of time, others have not.

Freyer² popularized the suprapubic prostatectomy in the early 1900's. Time has proven it a successful method of removing prostatic obstruction, but it is not the answer to all types of prostatic obstruction. The problem of hemorrhage has been the bugaboo of all prostatectomists since the first perineal prostatotomy by Dessault in 1795¹³. Post operative hemorrhage has been treated by numerous methods. The first operators enucleated the gland and placed a large tube suprapubically¹. This was followed by packing the fossa with gauze or

uterine tape and later by use of the Hagner or Pilcher⁹ bag. Cabot¹⁰ practiced suturing the vesicle neck, but this requires extraordinary skill and is very time consuming. Recently the Foley bag catheter has been used and still more recently the anticoagulents, Gel foam⁷, oxidized gauze and cotton⁵ in conjunction with the Foley bag catheter and with or without fibrin⁷.

Renal function tests, that is blood chemistry, Phenolsulphonphthalein and intravenous urograms have helped eliminate uremia the most frequent cause of death of early day suprapubic prostatectomy. Uremia was the cause of 26 percent of the deaths in the series by Deaver¹³. Today it is relatively infrequent. Post operative infections which formerly were a source of increased morbidity and mortality, are now reduced by chemotherapy and anti-biotics³.

Our series of cases is small and non-con-

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association, May 18, 1948.

clusive, but it has been very educational to the operators. Our cases were selected for suprapubic prostatectomy primarily because of the size of the gland, and secondarily because of their general physical condition. Roughly, any gland suspected of weighing 50 gms. or more was selected for suprapubic prostatectomy. We feel that we can adequately resect in one hour all glands smaller than 50 gms. We feel, also, that the patient should not be subjected to a transurethral resection for a longer period than one hour. We feel, likewise, that the morbidity and mortality is lower on one suprapubic prostatectomy than to resect a patient two or more times. All our patients were in fair health. That is, they were ambulatory, had an adequate urinary output, and had a normal blood chemistry. There were four hypertensives in this group, two with a pressure over 200 mm of mercury, systolic, one with bronchial asthma, and one with diabetes. The non-protein nitrogen was below 53 in every case. Pre-operative drainage was necessary in 75 percent of our cases, and we found that a small urethral catheter, 16 to 20 French, 5 c.c., Foley bag or Robinson, taped in place was tolerated well, even in cases where long standing drainage was necessary, thus eliminating the necessity of the two stage operation.

Vasectomy was done before introduction of any instrument into the urethra when possible. Three cases did not have vas ligation. Two of these three developed post operative epididymitis, one during his early convalescence which added to his hospital stay, the others two months post operative.

Post operative hemorrhage was met in one case only. This patient had a pre-operative blood pressure 186/80 and his post operative pressure was well over 200. At the time this surgery was done, we were practicing irrigating the bladder every thirty minutes to one hour until clear. We believed that the irrigations dislodged the oxycel gauze from the fossa and caused the hemorrhage. After the irrigation was stopped, the hemorrhage subsided, stopped, and was followed by a mild post operative shock which was controlled by transfusion and intravenous fluids. Since this case, we have discontinued routine irrigations. No suprapubic prostatectomy is irrigated post operatively except to determine the patency of the catheter, and this is done with small amounts of sterile water, and only by the

doctor. All cases in our series had chemotherapy and penicillin. Our choice of the sulfas is sulamyd (Schering). The dosage is smaller (grains seven and one-half every six hours). Older people tolerate it better and it is just as effective in the B-coli group¹¹. Penicillin was given in dosage of 20 to 30,000 units every three hours beginning 24 hours pre-operatively and continuing five to seven days post operatively. It was discontinued when the temperature remained normal for 48 hours. No severe infections of the urinary tract or wound were encountered.

Prostigmine was employed routinely after the first two cases developed post operative gaseous distention. The usual dose was one cc of one to 4,000 solution every three hours for six doses. Two patients had post operative distention on the routine use of the drug, but they were considerably milder. It was also found that the post operative enema or laxative were, in most cases, unnecessary. The patients usually had a bowel movement on the second or third post operative day.

Suprapubic catheter was removed on the fourth or fifth day. On the preceding day the Foley bag urethral catheter was removed and replaced by a F. 20 to 22 Robinson catheter. Then 24 hours later, the suprapubic catheter was removed, our idea being that the smaller catheter does less damage and is less irritating to the urethra and it drains better. The penile catheter was left indwelling from eight to 17 days, average 11 days. Our criteria for removal of the catheter was that the patient be dry, and healed above for 36 to 48 hours. We no longer believe this is necessary, for on two occasions the patient continued to leak above profusely, in spite of the fact that the urethral catheter drained also. They stopped draining and healed readily enough after the catheter was removed and a pressure dressing was applied. Both of these patients tolerated the urethral catheter poorly, both pre and post operatively, and we believe the irritation to the bladder by the catheter kept them from healing properly.

De Vries⁴, Johnson⁶ and Stockwell¹² use different methods to accomplish the same purpose, that is, delayed closure of the cystotomy wound after the suprapubic catheter had been removed. Johnson does this by a double purse string suture of chronic No. 1 catgut around the opening that is closed

after the removal of the cystotomy tube, usually in 24 hours. He reports most of his patients were discharged dry and voiding in two weeks. Stockwell¹² uses a through and through silk suture on each side of the cystotomy wound. This is brought out and tagged and tied on the second to the fourth day after the suprapubic tube is removed. He leaves this suture eight to 10 days post operative. This seems a sounder practice. Silk suture does not deteriorate as does chromic. The Johnson⁶ technique involves tying the suture down in the wound, consequently involving more pain.

All of our results can be classed as functionally good. We had one case of post operative incontinence, requiring the need of a Cunningham clamp for two and a half months. However, he regained his control perfectly, and on his last office visit, seven and a half months post operatively, he had a good stream, nocturia times one, and no incontinence. There were no deaths. The earliest patient left the hospital in 12 days, the latest 45 days, average 18 days. The longest stay was by the patient who was incontinent following surgery but regained control.

The smallest gland weighed 40 grams, the largest 120 grams, average weight 82 grams. All tissue showed adeno fibromatous hypertrophy except one that showed low grade adeno carcinoma in an adeno fibromatous hypertrophy. This patient has been followed six months and there is no evidence of local malignancy or metastasis. Three cases had had previous trans-urethral surgery on the prostate gland, one with a Brasch-Bumpus-Thompson punch, the other two by McCarthy resectoscope. They had fair functional results from six to 10 years.

These cases represent 23 percent of our prostatic surgery, 77 percent being done by trans-urethral resection. Our technique is as follows:

Under spinal anaesthesia the bladder is filled with sterile water through an indwelling catheter. A small transverse incision is made four fingers above the symphysis pubis. A longitudinal incision is made in the fascia, and the rectus muscles are separated by blunt dissection. The peritoneum is reflected over the dome of the bladder, and a small transverse incision is made in the bladder after first allowing the water to escape through the penile catheter. Two stay sutures of chromic catgut are used as a guide and sutured through the upper and

lower lips of the transverse incision in the bladder. The penile catheter is removed. Two fingers are inserted through the bladder wound and the prostate is enucleated intraurethrally, aided by counter rectal pressure. The fossa is packed with hot tapes for five minutes and then inspected. Any large bleeders are clamped and tied. A 24 French 100 cc bag catheter is then introduced into the bladder on a stylette. The bag is inflated to the approximate size of the removed gland. The fossa is packed with oxycel gauze, and the inflated catheter is carefully pulled into place, tucking the mucous membrane of the vesical neck into the fossa. Traction is made on the penile catheter for about five minutes and the bladder is again inspected. If hemostasis is satisfactory, a 24 F. Pezzar catheter is carried through a stab wound in the highest point of the bladder. The incision in the bladder is closed with a double row of plain number one catgut sutures. A penrose drain is placed in the space of Retzius. The fascia is closed with chromic number one catgut. The drain and suprapubic catheter are carried through a stab wound one inch above the line of incision in the midline. The skin is closed with silk. As a general rule the patient may dangle his feet on the second or third day and is out in a chair by the fifth day.

The above technique has been used on 13 cases from 61 to 83 years of age. All had good functional results. There was no mortality.

SUMMARY

A group of 13 cases of suprapubic prostatectomy has been presented. Patients that needed pre-operative drainage were drained per urethra by a small (16 to 22 F.) Foley bag catheter. All cases were one stage prostatectomies. Vas ligation was done either preoperatively or at the time of prostatectomy in 10 cases. Two of the three cases not having vasectomy developed post operative epididymitis. Oxycel gauze was used to pack the prostatic fossa and a 24 F. Foley bag catheter filled with the amount of water depending on the size of the removed gland. One post operative hemorrhage was attributed to washing the oxycel from the fossa. Good hemostasis on all other cases not irrigated.

Our morbidity was four to seven and a half days longer than the authors who used a delayed cystotomy closure. We believe

that by incorporating this procedure we can get much better results on the larger benign prostatic hypertrophy than attempting to resect them.

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AN EVALUATION OF PROSTATIC RESECTION*

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From time immemorial a great many elderly men have been troubled with difficulty and frequency of urination, finally leading to complete retention; so, there is more truth than fiction in the old saying that a man spends the first 50 years of his life trying to make money and the last 50 years trying to make water. These symptoms are caused by obstruction to the outflow of urine at the bladder neck and in the prostatic urethra. The pathology present is a median bar or contracted bladder neck in approximately three percent, carcinoma of the prostate in 17 percent and benign hypertrophy of the gland in the remaining 80 percent. In the first two the pathological tissue infiltrates and is a part of the prostate, while the adenoma is distinct and separate from the gland. It is derived from the small glands just beneath the mucous membrane of the posterior urethra, which, as they grow larger, compress and thin out the true prostate, which forms the so-called capsule, so a prostatectomy really means the removal of the adenomatous tissue, while the prostate is left behind.

The important history of prostatic surgery dates back about a half century when

Freyer first successfully enucleated the gland through a suprapubic opening. Shortly after the turn of the century, Hugh Young perfected his perineal operation and, what is more important, demonstrated that by proper preliminary preparation the mortality rate could be cut to a very low figure. Finally Millin recently has brought out the retropubic operation which bids fair to supersede perineal prostatectomy. All this time we have been striving to find a method by which the obstructing portions of the gland could be removed through the urethra. First there was the Young punch, then the Caulk cautery punch, both of which lacked vision. Then Stern brought out his electro-tome which had vision plus cutting but no way to stop bleeding. Finally T. M. Davis¹ brought out his operation which combined vision, cutting and coagulation of bleeding points. It was the impression at first that this was a simple operation, but we speedily realized that it was one of the most difficult, delicate and technical operations in all surgery. In an open operation one can repair a mistake but in a resection one cannot take back a cut that goes through the bladder or severs the external sphincter. It is, therefore, all important to know where

*Presented at the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association, May 17, 1948.

you are at all times for the resectoscope is a marvelous instrument and by the same token a deadly weapon. From the beginning, it impressed us as a rational operation because when done properly the patient voids a full, free stream and empties his bladder, which fulfills the physiological requirements. If the operation is not done properly, the patients will be piling up in your office and then you will go back to an open operation or learn to do a resection correctly, for we cannot emphasize too strongly that if the results are not good, it is the fault of the surgeon and not of the operation. There is no logic in dividing the glands into those small enough to resect and those too large to resect as in latter cases it simply means that more tissue has to be removed. The very large glands requiring enucleation represent less than five percent of all cases. As confidence and dexterity increased, more and more tissue was resected so that now better than 90 percent of the gland is removed; we, therefore, achieve what amounts to a transurethral prostatectomy. Over a period of years the senior author^{2,3} evolved four simple cystoscopic rules for a successful resection which have become accepted everywhere. These are as follows:

1. With the sheath carefully centered and the verumontanum just visible there should be no tissue observed to fall into the open end of the sheath when it is rotated in a complete circle.
2. On examination with the retrospective telescope, the entire circumference at the junction of the operated area and bladder should show no prostatic tissue projecting into the bladder at any point.
3. On examination of the prostatic cavity with the retrospective telescope, no tissue should be seen projecting into this cavity.
4. The verumontanum should be completely visible with the retrospective telescope.

If these four rules are followed, one can be assured of a good result in practically every case as the chances of human error are reduced to a minimum. Up to May 1, 1948, we have had 161 consecutive resections on 155 patients without a death. During that time we did two prostatectomies. The oldest patient was 88 and 74 were more than 70 years old. The majority re-

ceived no preliminary drainage, but, if the NPN was elevated, there was severe nocturia, marked residual urine or a badly infected bladder, continuous catheter drainage was instituted. Blood counts, NPN and prothrombin time are always done. Vitamin K is given routinely and fluids are forced. Small doses of sulfonamids or mandelamine are also given. The prothrombin is brought up to 100 percent before operation. If there has recently been cardiac failure, compensation should be established for at least a month. The patient should feel good, eat well and have a good urine output before surgery. However, a certain number improve up to a point and then remain stationary. These are then operated on, thus taking a calculated risk. Three grains of nembutal are given pre-operatively and 100 milligrams of novocain spinal anesthesia is used. Bilateral vasectomy is carried out only in the debilitated and those over 70. Resection is carried out as rapidly as is consistent with safety. The patient is resected for not more than an hour unless an elusive bleeder extends the time. The most tissue removed at one operation was 121 grams, and 171 grams in two sittings. Bleeding points are systematically searched for and coagulated. It is very important that at the finish the irrigating fluid returns clear, for we are firmly convinced that the time to stop bleeding is on the operating table. A 22F bag catheter is placed in the bladder. If there has been more bleeding than usual, a transfusion is given at once. In fact, they are used liberally both before and after operation — 3,000 cc's of 10 percent dextrose plus three grams of sulfadiazine is given in the first 24 hours and water freely. There are strict instructions to irrigate only if the catheter becomes stopped up. The legs are exercised frequently to combat thrombosis. The patient is allowed up on the second day and in uncomplicated cases, the catheter is removed on the fourth day and he is discharged on the sixth day. Most patients have no pain or discomfort at any time. When the catheter is removed, he should void a full, free stream the first time and be proud of it. The residual urine will be less than 50 cc's. If there is pain or straining, difficulty and a poor stream, it means that not enough tissue has been removed, and the patient should be returned to surgery and this tissue removed. Otherwise, he will be a poor advertisement. We do not let a patient leave the hospital until he is satisfied. As

for complications, hemorrhage is disagreeable but not serious if the clots are washed out and bleeding points fulgurated promptly. In these 161 resections there were only two cases requiring fulguration of bleeding points the day of the operation. Since checking the prothrombin estimation and giving Vitamin K routinely there has been much less operative and post-operative bleeding. In five cases fulguration was required from 10 to 21 days after operation.

Post-operative chills and high fever rarely occur since we have stopped post-operative irrigations. When they do happen, they have been quickly brought under control by the sulfonamids and penicillin. There was one case of periurethral abscess. Two cases have partial incontinence during the day, although cystoscopy reveals an intact veru. There were three cases of femoral thrombophlebitis and one of pulmonary embolism. What about recurrence? In only three cases who had been resected from six to 12 years before, less than 10 grams of tissue were removed. Two cases who had previously had a prostatectomy were resected.

Following operation the urine remains cloudy with pus for some time as it takes about six weeks for the prostatic cavity to heal. The sulfonamids or mandelamine are then given for three rounds on alternate weeks, at the end of which time the urine is nearly always clear and free of pus. During this time a 26F sound is passed and incipient strictures opened. We cannot recall a stricture in any of the above 155 cases, and we attribute this to the fact that a meatotomy is always done when necessary

and a metal covered sheath is used which is much easier on the urethral mucous membrane than the plain bakelite sheath. The majority of our cases are cystoscoped from two months to several years later and there is found a wide open prostatic cavity which is continuous with the bladder. A few small nodules of prostatic tissue are usually found, but the cavity is so large that they give no trouble. In the above cases there are two who have atonic bladders and carry 250 cc's of residual urine although they void freely and are satisfied. Ten cases get up four to six times at night and the remainder, that we know of, three times or less, the majority getting up not at all or only once.

Prostatic resection is a difficult, delicate and technical procedure, but, when properly done, the results are uniformly excellent and just as permanent as any other type of operation on the prostate. When properly done, there is much less shock, discomfort and post-operative trouble than in open procedures. Like many others, we have had our troubles and worries, but nothing has given us more satisfaction than time after time to see a grave surgical risk of advanced age come through the operation without shock or discomfort, and be alive and enjoying life several years later. We cannot emphasize too strongly that the secret of a successful prostatic resection is to do it properly. When a surgeon tells a patient the operation is not successful, he really means it is not successful in his hands.

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CLINICAL PATHOLOGIC CONFERENCE

*The University of Oklahoma School of Medicine
Presented by the Departments of Pathology and Pediatrics*

BELA HALPERT, M.D. AND JAMES B. SNOW, M.D.

OKLAHOMA CITY, OKLAHOMA

DOCTOR HALPERT: Occasionally a desperately ill patient will die before an adequate clinical history, physical findings or laboratory data can be elaborated. Under these conditions it is very difficult to establish an accurate diagnosis save by necropsy. Such is the case for today. With this handicap Doctor Snow will present and analyze the clinical story.

PROTOCOL

Patient: C. A. M., white female, age four months. Admitted October 14, 1947, died October 15, 1947.

Chief Complaint: Convulsions; "drawing of left side."

Present Illness: The patient was said to have been in good health until October 8, 1947 when she developed hoarseness and a slight cough. Two days later the mother noticed that she would become a little short of breath while nursing. Later the same day she became irritable, and would lie with her head drawn back. She then began projectile vomiting, became very pale, and seemed lethargic. She was admitted to the hospital at Muskogee, Oklahoma, with a diagnosis of bronchopneumonia. She was given penicillin and quinine. One time she stopped breathing and became blue; oxygen was given, and she recovered. On October 11, 1947 she began having 6 to 10 convulsions daily, first on one side of the body and then on the other. On October 13, 1947 she seemed somewhat improved and the convulsions were less frequent. She remained "stiff" between convulsions.

Past History: She was born at term by normal delivery. There were no previous illnesses.

Family History: The mother, 23 years old, was well. The father, 27 years old, was discovered to have active tuberculosis two weeks prior to the child's admission to the hospital. He had had a chronic cough since 1946. One sibling died at the age of eight months of diphtheria and pneumonia; one died five months old (1946) of "bronchopneumonia, intestinal trouble, and spinal

trouble;" three are living and well.

Physical Examination: At the time of admission the patient was well developed, well nourished, and appeared acutely ill. Her temperature was 105° F. The skin was pale and slightly cyanotic. Her pupils were constricted. She had a vertical and a rotary nystagmus. There was considerable bloody mucus in the nasal passages. The tympanic membranes were not injected. The anterior fontanelle was bulging and tense. Respirations were rapid and labored. There was decreased resonance over the lung fields, more marked on the right side. Ronchi were heard throughout both lung fields. Tactile fremitus was more marked on the right. There was a tachycardia. The abdomen was markedly distended. Liver and spleen were not palpable. There was an elongated, hard, movable mass in the right side of the abdomen approximately 2.5 x 1 inches and somewhat sausage shaped. A fullness was noted in the lower abdomen; this was thought to be edema. There was moderate pitting edema of the lower extremities. The extremities were cold, clammy, stiff and resistant to movement. The hands were held clenched. Knee and ankle reflexes were active and equal bilaterally. Biceps and triceps reflexes could not be elicited. There was no ankle clonus. Babinski's sign was absent. The neck was not stiff. By rectal examination no masses were palpable. A small amount of tarry stool was seen on the examining finger.

Laboratory Data: The urine was yellow, clear, pH 5.5; there were occasional red blood cells and one white blood cell per h.p.f. No casts were seen. On the day after admission there was 3+ proteinuria and innumerable red blood cells in the urine. The hemoglobin was 8.5 Gm. The red blood cell count was 2,880,000 with moderate anisocytosis and poikilocytosis. The white blood cell count was 24,750 with 27 percent neutrophils, which contained toxic granules, 71 percent lymphocytes, and 2 percent monocytes. Spinal puncture on the day of ad-

mission, and the day after admission, showed only gross blood. No organisms were found by Gram's stain and by acid fast stain of the fluid. Chest x-rays revealed a normal sized heart, costophrenic angles and lung fields clear; in the abdomen there was a large amount of gas throughout the stomach, small and large intestines. In the region of the sigmoid colon gas contained in the bowel was no longer visualized. The impression was obstruction of lower end of colon; intussusception and volvulus were considered.

Clinical Course: Surgical consultants made a diagnosis of ileocolic intussusception of two to three days duration. They recommended operation as soon as the patient's general condition would warrant it. She was given plasma and calcium gluconate intravenously. Early in the morning October 15, 1947 she had a convulsion, clonic in character, then became quiet. Respirations became shallow and rapid, but improved after a few minutes when coramine was given. She had tarry stools and there was blood in the fluid removed by Wangenstein tube. The mass in the right lower quadrant was no longer palpable. A blood transfusion was begun and she was taken to the operating room. She died before the anesthetic could be started.

CLINICAL DIAGNOSIS

DOCTOR SNOW: Convulsions in infancy may have many causes and these may be either intracranial or extracranial. In this case the association of convulsions with fever, irritability, lethargy, projectile vomiting, a tendency to lie with the head drawn back, constricted pupils, nystagmus, and a bulging tense anterior fontanelle suggests an intracranial infection as the basis. The history of close contact with a case of active tuberculosis forces an immediate consideration of tuberculous meningitis. The absence of stiff neck, ankle clonus and Babinski's sign — the presence of active and equal knee and ankle reflexes, and no mention of paralyzes of any of the extra-ocular muscles are against a diagnosis of tuberculous meningitis, however. Brudzinski's and Kernig's signs are not mentioned. Then too, the course seems rather rapid for tuberculous meningitis — the average duration is about three weeks, though in the young infant the course may be shorter.

Spinal fluid examination on two occasions revealed gross blood; this was probably due to trauma. No organisms were demon-

strable either by Gram's or by acid fast stain. The spinal fluid in tuberculous meningitis is usually fairly characteristic. It is clear or slightly turbid. The cell count ranges from 20 to 500 cells per cu. mm., and the cells are mainly lymphocytes. The protein content is increased to 100 mg. percent or higher. The sugar content is decreased and the total chlorides are almost invariably reduced — often below 600 mg. percent. Recognition of tubercle bacilli in the fluid makes a positive diagnosis. If the chest film in this case had shown a tuberculous lesion it would have been supporting evidence of tuberculous meningitis. Without this, and with the lack of positive findings in the spinal fluid, the diagnosis of tuberculous meningitis can not be strongly advanced, nor can it be eliminated as a possibility. The same applies to purulent meningitis and to the various virus infections which are capable of producing meningitis, encephalitis or poliomyelitis.

A diagnosis of bronchopneumonia was made on the third day of the patient's illness and she received penicillin. This was before her admission to University Hospitals. Respirations were rapid and labored when examined here. A reasonable increase in the respiratory rate would be expected with a temperature of 105° F. A marked increase in respiratory rate might have represented acidosis. If the CO₂ combining power of the blood had been determined, this point could be clarified. The lack of definite physical signs over the lungs and roentgenographic impression of "clear lung fields" seem to rule out bronchopneumonia. However, bronchopneumonia may have occurred as a terminal event, as it so frequently does in young infants.

I shall not recount the physical signs and x-ray evidence which led to a diagnosis of ileocolic intussusception by the surgical consultants, but rather discuss certain points which are against this diagnosis. First, there is no history of severe paroxysmal abdominal pain. Second, if intussusception has been present for two or three days, a palpable mass can usually be felt on rectal examination. Bloody mucus, so-called currant jelly stool — rather than tarry stool, is ordinarily seen on the examining finger. The presence of tarry stools is more likely to be associated with a bleeding diverticulum or purpura. It is difficult to estimate the size of a mass being felt in the abdomen, but an intussusception of two or three days duration

should produce a mass which feels larger than one inch in diameter. Furthermore, it is very unlikely for an intussusception of this long standing to reduce itself spontaneously.

A fullness was noted in the lower abdomen. There was moderate pitting edema of the lower extremities. On the day of admission, a specimen of urine showed an occasional red blood cell and occasional white blood cell. No casts were seen. The following day another specimen revealed 3+ proteinuria and innumerable red blood cells. The presence of an abdominal mass which fluctuates in size or disappears, especially when associated with pitting edema and microscopic hematuria, suggests an obstructive lesion of the urinary tract, usually congenital. Under these conditions a fluctuating abdominal tumor might be a urinary bladder which was periodically distended. In obstruction of the urinary tract, either below or above the bladder, distended ureters and hydronephrosis may develop. The lesion may be unilateral or bilateral, depending to a great extent upon the site of the obstruction. A determination of the non-protein nitrogen of the blood, and the serum phosphorus and calcium are valuable laboratory procedures when such a condition is suspected. If this consideration should prove correct, many of the symptoms and signs in this case could be on the basis of renal failure with uremia. Tetany, which is often present in uremia, is thought by some to be due to the retention of phosphate, which has a depressing effect on the blood calcium level. Tetany could account for the convulsions and stiffness of the extremities and clenching of the hands (carpal spasm.) This child might have developed tetany on an entirely different basis. If there actually was an intestinal obstruction, such as intussusception, persistent vomiting might have resulted in alkalosis with tetany as an associated change. Pitting edema under these conditions could be explained by hypoproteinemia.

The red blood cell count was 2,880,000 and hemoglobin was 8.5 gms. This secondary anemia could be the result of hemorrhage or infection — probably both factors were concerned. The white cell count was 24,750, neutrophils 27 percent, lymphocytes 71 percent and monocytes 2 percent. Such a differential count is not infrequently seen in young infants with serious infections. It suggests lack of resistance to a fulminating

infection or a severe toxic state.

Based upon information contained in this protocol the following clinical diagnoses are considered in this order:

Intracranial infection — possibly tuberculous meningitis

Obstructive lesion of the urinary tract, congenital in type, complicated by uremia, tetany and acidosis

Secondary anemia

The diagnosis of intussusception is purposely omitted because the data in the protocol do not substantiate it. It is realized that this is a rather bold stand when the diagnosis was made by the surgical consultants and suspected by the x-ray department.

CLINICAL DISCUSSION

QUESTION: How would you rule out tuberculosis of the kidney?

DOCTOR SNOW: I do not believe that tuberculosis could be excluded without detailed studies of urinary sediment, cultures, etc.

ANATOMIC DIAGNOSIS

DOCTOR HALPERT: I want to commend Doctor Snow on his excellent evaluation of the clinical data. At necropsy the child was well developed and well nourished. The peritoneal cavity contained no excess fluid; the edge of the liver was within the costal margin and neither the liver nor spleen appeared enlarged. There was a telescoping of a portion of the proximal jejunum into the distal jejunum about 40 cm. beyond the duodenojejunal junction; this involved a length of only two cm., however. This could be easily separated and there was no evidence of persistent ischemia or inflammatory reaction. It was assumed therefore that this was an agonal event and of no clinical significance. There were no significant changes in any of the other serous cavities.

In the lower lobe of the left lung there was an area of caseation approximately two cm. in diameter which was clearly demarcated from the rest of the lung. The lymph nodes which drained this area were markedly enlarged and exhibited extensive caseous necrosis. The right lung was not involved. There was no evidence of pneumonia in either lung, although the posterior portions exhibited slight hyperemia. The liver, although of normal size, presented slightly rounded margins and was of yellow hue, indicating an increased content of fat. The left kidney was absent. The right kidney weighed 140 gm., approximately twice the

size of a single normal kidney. This organ was rounded and consisted of a shell less than one cm. thick. The papillae were shortened and markedly flattened and the calices were markedly distended, as was the pelvis. The ureter was distended also. These distended passageways were filled with clear urine. The urinary bladder was essentially normal except that there was no ureteral orifice on the left side. The left ureter was entirely absent, along with the left kidney. The left side of the uterus exhibited hypoplasia; the Fallopian tube and ovary were decreased in size.

The most important change was observed in the cranial cavity. The leptomeninges were covered with a layer of thick yellow pus which obscured the space between the convolutions and filled the sulci. This covered the convexity as well as the base and almost the entire surface was equally involved, so that there was no suggestion of origin at any particular site. Exploration of the middle ear on both sides revealed no suppuration, so that otitis media was excluded as the cause of this meningitis. Our impression, based on these gross findings, was leptomeningitis produced by some pyogenic organism unrelated to the tuberculous pulmonic complex. To return now for a moment to the tuberculous process, the lesions in the lymph nodes represent lymphogenous dissemination. This was as active progress-

ing tuberculous process. Although no other tuberculous involvement was noted, it is likely that if the child had survived, the tuberculosis would have progressed and extended, possibly to produce hematogenous miliary tuberculosis.

The second major lesion is represented by hydronephrosis of the single kidney which this child possessed, there being complete aplasia (absence) of the other. The site of obstruction was just at the entrance of the ureter into the urinary bladder. Here, then, was another progressive lesion which would ultimately have led to serious clinical manifestations and would probably have caused death.

Among other findings may be included marked atrophy of the thymus in which most of the cortical cells had disappeared. This is an expected finding in conditions of chronic infection or debilitation.

Our final anatomic diagnosis therefore was:

- Leptomeningitis, acute, purulent
- Aplasia of kidney, left, with hypoplasia of adnexa, left
- Hydroureter and hydronephrosis, right, with atrophy of parenchyma
- Fibrocaceous tuberculous complex, lung, left
- Fatty change of liver
- Atrophy of thymus.

TWENTY-FIVE YEARS AGO

"From our early files of Editorial Notes Personal and General."

Dr. Robert S. Love, Oklahoma City, has changed his location to 217 National Bank Building.

Okmulgee County Medical Society had a good meeting November 6th at Okmulgee, with the largest attendance in its history.

Dr. S. J. Bradfield, Bartlesville, has returned from San Francisco where he attended a clinic.

Dr. Fred S. Clinton, Tulsa, is back from attendance at the convention of the American College of Surgeons at Chicago.

Dr. J. M. Alford, Oklahoma City, has returned from Chicago where he has been attending the clinics.

Dr. J. J. Henke, Hydro, recently celebrated the twentieth anniversary of the establishment of his practice there.

Dr. P. P. Nesbitt, Muskogee, attended the meeting of the Southern Medical Association at Washington.

Dr. Winnie Sanger, Oklahoma City, has been elected president of the State Federation of Women's Clubs, in session there recently.

Dr. and Mrs. Gregory A. Wall, Tulsa, are back from Chicago where the doctor attended the clinical congress of the American College of Surgeons.

Special Article

THE TASK AHEAD*

JOHN H. LAMB, M.D.

OKLAHOMA CITY

To those who have given of their time and effort for almost three years to see a great vision blossom into a reality before our eyes, it is our duty to give a report on the progress and task ahead to a loyal profession that has made this task possible.

To those who have aided in every city and district organization, we wish to thank you for your early understanding and grasp of what this organization will mean in the future of medicine in Oklahoma. Without your support early in this venture, little would have been accomplished. The loyalty of the alumni of the school of medicine throughout Oklahoma has been a strong framework which made this work a success, but there has been an equally strong support from Alumni of many other schools who have filled the leadership rolls throughout the state. One-half of the 520 doctors over Oklahoma who have pledged their support to the foundation have been in the latter category.

For three days we had the honor and pleasure to have as our guest, Dr. Alan Gregg, Director of Medical Sciences of the Rockefeller Foundation. His visit was a great inspiration to the few that were able to hear him, but I wish to report to you a condensation of his speeches and talks before a combined building and research committee meeting, Board of Directors and a laymen's noon luncheon with the hope that you too may be inspired.

First, I quote from his speech before the Board of Directors of the Research Foundation:

"The Oklahoma Medical Research Foundation is unique in my experience. I have never seen so much money pledged by so many persons for so inclusive a purpose. If the Oklahomans can match their initial generosity with steadfast loyalty and if the trustees can match this loyalty with understanding and discrimination, then this part

of the Southwest will begin an extraordinary chapter in the history of medicine in America, a chapter that will rightfully be theirs.

"The very existence of the Oklahoma Medical Research Foundation has made me aware of the contribution that Oklahoma could make to the interest and pleasure of being an American. If within 60 years of becoming a state, Oklahoma can forever bring into being, and maintain a medical research institute supported by a large number of private givers it will be a remarkable accomplishment. Oklahomans must be the only judges of the capacity to create so early the most advanced instrument of progress—an institution devoted to scientific research.

"Medical research is a guerrilla warfare on the unknown—the unknown causes of dreadfully familiar diseases and of the changes we call old age. Is it too soon for the world to begin to look to the American Southwest for what it believes it can do in combatting the unknown? Perhaps it is too soon to expect a contribution but not too soon to expect the beliefs and plans that always precede the accomplished fact. I would regard the Oklahoma Medical Research Foundation as evidence that such plans and convictions are beginning to emerge. How wisely and how well can they be realized without the support and loyalty of Oklahomans themselves? If the Southwest is really to flower intellectually, it will only be in the warmth of native loyalty, popular understanding and local support.

"There are those who think that nothing great for the public good can be started successfully nowadays without the aid of the Federal Government. They may well watch the Oklahoma Medical Research Foundation with \$2,267,496.97 pledged from 6,641 supporters. There are others who believe that we need not look to the Federal Government to start and maintain everything. They will do well to provide by their

*A report to the state medical profession on the progress of the Oklahoma Medical Research Foundation by John H. Lamb, M.D., secretary of the Research Foundation.

support a few more examples of *private* initiative to prove their belief is true.

"Our sense of relative values determines our purpose. Our purposes and objectives decide the ways and means. In America in 1947 out of a calculated national income of 200 billion, eight billion seven hundred million went for alcohol, six billion for horseracing and its betting, three billion four hundred million for tobacco. And for *all* forms of education and welfare two billion. We had better keep our children singing, "God save America!" Poor kids!

"What estimate do you make from this, of our sense of relative values? Maybe it is such a sense of values that makes an honest effort to lengthen and lighten life through medical research have to struggle for recognition, understanding and an opportunity to prove its value. The Oklahoma Medical Research Foundation depends in larger measure than you think on your *sense of values.*"

At four o'clock one afternoon Dr. Gregg sat down before 30 physicians, dentists, and laymen, a combined meeting of the Research and Building committees. He spoke for one hour and a half. No one was aware of the passing time. "Pitfalls of Establishing a Research Institute" was his informal topic. He said, "There are three essential things for a successful Foundation: 1. Selecting the proper fields for research. 2. Selection of top personnel. 3. Providing that personnel with the material and incentives.

"*Great* attention should be paid to the quality of research personnel. There is a danger in that Medical Research has oversold itself, possibly. There is plenty of money available but not sufficient top caliber personnel to staff Foundations and Institutes.

"For instance, Medical Schools are not being adequately financed to produce research men, and Medical Schools today face large deficits. In addition, Foundations such as yours must compete with the Government and other agencies for research men. However, you do have a distinct advantage of freshness and freedom from the old, maybe too old, established institutions. In being closely allied with the Medical School, you will have the opportunity to begin producing research men as well as raising the standards of all those graduating from the school.

"In employing scientific workers, beware of hiring a salesman instead of a scientist. Most scientists are buyers — not sellers.

They do not have aggressive personalities. They have highly developed critical faculties. You have to be patient with them — so do not hire on the basis of first impression.

"You must be particularly careful in the selection of a Director, and he should be called a 'Director' and not a 'co-ordinator.' Many scientific workers do not like to be co-ordinated. He should be, in the best sense of the word, a guerrilla chieftain, able to quickly exploit a situation and make quick and firm decisions. Best of all, he must be able to reject firmly projects which are not wise. He should be, preferably, between the ages of 45 and 55. A younger man in the thirties is still too concerned with making a reputation; still too interested in research itself. On the other hand, a man in his sixties is already over the crest and it is hard for him to drive a Foundation to success in its first years.

"The ideal Director should be a midwife to the young scientists. He cannot be beyond the age when he can be a 'mother' himself.

"Another recommendation against employing a Director in his sixties is that younger men on the staff, feeling that his years are numbered, contest for power and rivalries are created.

"A good scientific director must be able to keep his Board of Trustees constantly sold. He must explain to them carefully and patiently the details involved in any experiment which they know little about.

"Some of the pitfalls facing a new Foundation are:

"First, impatience for startling results and to show the public right off the bat that you are a whopping success. To bring my point home, I give you the example of the Yale Institute for Human Relations. When it opened, extravagant notices in newspapers and elsewhere were written to the effect that it would solve all the ills of human relations. Of course, this did not happen and many people were very disappointed. Don't over-sell people in Oklahoma in that way. It may be 20 years before you develop a major contribution or understand the cause for some disease.

"The second pitfall: Again I emphasize keeping away from the once-a-month report the poor scientist has to make to the Board of Trustees or Director. A good scientist is a queer person. Let him alone.

I know a great scientist, one of the top men in this country, who did not have an

idea for three years. If he had had to make monthly reports to the Rockefeller Foundation, he would have lost his job.

"Let your scientists alone. Don't bother them with details of making monthly reports. Don't try to make administrators of your scientists. Don't give them any responsibility connected with financial control of your Foundation. One of the biggest mistakes we make in this country is to pull a scientist out of promising research and make him an administrator.

"The third pitfall: Beware of fashions in research work. Research, like women's clothes, runs in cycles. It is fashionable now to research in cancer. Do not be swayed by this sort of thinking. Build many of your projects around the individual capabilities of your staff, irrespective of whether the project is fashionable or not.

"Fourth: Don't overload your research man with teaching duties. Make teaching optional. However, it is good for them to have a teaching relationship with the Medical School. It is good to be close to the stream of youth — many times a question from a resident sets the stream of thought in a profitable turn. In that way, they are forced to clarify and formulate their ideas. Better yet, have them share a common lunch room with the Medical School Faculty for informal swapping of ideas.

Fifth, and very IMPORTANT: Prepare to keep your Foundation continuously staffed with a nucleus of young men. Many Foundations neglect this with the result that their staff is soon depleted. Furthermore, sources of supply for you should be the Medical School. Constant attention should be paid to those students who show research promise. If you recruit one student out of 60 or so enrolled in a class, you have done well.

Sixth, Don't let your researchers mine too much material. Some scientists have a habit of accumulating five years of records and material without ever formulating it. Have them, from time to time, maybe every year or two, draw up some conclusions on progress up-to-date, even if these conclusions are tentative. Always remember this, the initiative should be left to the investigator in a certain research project.

Some of the larger fields in which research is needed now include the chronic diseases, cancer, heredity, child growth and development, rheumatism, geriatrics and psychosomatic diseases. Until recent years those doing investigation in psychiatry

were classified as charlatans. Now it is extremely respectable to admit each organ is controlled by nerve pathways as are its blood vessels. These nerve pathways under control of a conscious and subconscious dictation, the brain.

Lastly, your Foundation gets contributions from multiple sources. It is different from Foundations like the Rockefeller. Therefore, you have an increasing responsibility to the general public. You must get from them an enthusiastic understanding of what you are doing. Furthermore, you must show continual gratitude to these people and that means the \$1.00 subscriber, too. You must remind them you are aware of their contribution and continue to appraise them of the progress of your Foundation.

The Foundation is very important to the medical profession. The average doctor is overloaded with patients and is continuously faced with the possibility of pain and possible death and cannot pursue the cause of a disease relentlessly. The Scientist can. A Foundation puts a base under the medical profession and gets us away from the voodoo and magic. It is a monument to the soundest kind of knowledge in that it is based on testing and experimentation. Much of the medical profession and the confidence it exacts from patients is based upon prestige. A Foundation lends to that prestige for it is trying to find the causes of those diseases which baffle the general practitioner today. It is important to the Medical School. It is a vital spark, adding a tone to medical education. It is emphasizing the importance of pure research."

Dr. Gregg was a great inspiration to us all and it is complimentary to the work of Dr. Waldo Stevens, and others, who attracted his attention to Oklahoma and received his promise to make a three day visit during his vacation time.

Our plans for 1948-1949, to outline it briefly:

1. The campaign is to be carried on among the professional groups by our own workers. Drs. Moorman and Rountree have agreed to head-up the final drive to reach our 1000 doctors who will support the foundation, giving us a \$1,000,000 broad base for 10 years survival, irrespective of outside gifts. The dentists and pharmacists will push their campaign in a similar way—using no outside expensive help.

2. In counties which have not yet completed their lay campaign, this will be set

up and finished.

Financially, we have \$2,267,496.47 pledged with \$330,000 cash in bonds and monthly payments on pledges coming in at \$20,000 a month.

Also, the Variety Clubs of Oklahoma have added a \$25,000 payment on their pledge of \$600,000 this last month.

3. On October 5, our architect, Mr. Truett Coston, of the firm of Coston and Frankfort, gave us preliminary plans of the building. Estimates are in the hands of the Building Committee, ably headed by Mr. William Payne of Oklahoma City, as to the cost of the building and although much higher than when the idea was conceived are within the range of our contributions. It is

hoped that construction can be started at least by the first of 1949. Efforts are also being made to secure adequate support for tunnels connecting the south hospital side with the north medical school side and connecting all three institutions.

4. The research committee, with Dr. Henry Turner as chairman is earnestly working on securing of a Director upon which much of the success of this project depends.

So in conclusion, raising the money is only the embryonal stage of this undertaking. We have herculean tasks ahead but an earnest group of workers will carry on. We hope that each doctor will feel it his duty to be a contributor in some way to this great medical project.

DRUG SOLUTION RECALLED

The Federal Security Agency's Food and Drug Administration warn physicians and dentists that certain codes of procaine hydrochloride solution manufactured by C. B. Kendall Company, Indianapolis, Indiana, caused severe necrotic damage upon injection. The facts came to light only recently when the American Medical Association informed the Food and Drug Administration that a physician reported injuries from a batch of the solution coded 24830.

This code was placed in distribution in February 1948. C. B. Kendall Company determined, following reports of untoward reactions, that the solution is highly acid, possessing a pH of about 1. The company attempted to recall the lot by a letter dated June 3, addressed to each purchaser of the vials, which directed their return, and by recall efforts of its own salesmen. This recall program has not been completely effective.

The Food and Drug Administration has just learned that another batch of the firm's procaine hydrochloride solution, coded 64712, has caused several alleged necrotic reactions. The pH of the vial of this lot was found to be 2.9.

Pharmacological work being performed by the Administration indicates that these two products are dan-

gerous and should not be used. They have been distributed in the area from Florida to Wisconsin and from West Virginia to Texas.

The C. B. Kendall Company has distributed several other lots of injection drugs which possess a pH of 3.0 or less. Of these the firm has voluntarily recalled the following products on which complaints have been received:

Vitamin B Complex Stronger — Lot No. 54843

Vitamin B Complex — Lot No. 44832

Pentabexin — Lot Nos. 44823 and 54837

Thiadoxin — Lot Nos. 34808, 44817, and 64842.

Also, the following injection products of C. B. Kendall Company have shown low pH values as indicated:

Product	Lot No.	pH
Vitamin B Complex Stronger	64844	2.9
Vitamin B Complex	54811	2.8
Thiamine Hydrochloride	34817	2.6
Thiamine Hydrochloride	74806	2.9
Pyridoxine Hydrochloride	74725	2.7
Pentabexin	64812	3.0
Procaine Hydrochloride	74871	3.0

The above facts which have been obtained to date require the issuance of this notice to physicians even though the investigation has not been completed.

MEDICAL SCHOOL NOTES

Dr. Willard V. Thompson, Teaching Fellow in Oncology, spent two weeks at Cornell Medical School in New York City. He attended an intensive course in the "Cytologic Diagnosis of Cancer in Body Fluids" given by Dr. G. N. Papanicolaou.

Dr. Henry J. Freede began a residency in Orthopedic Surgery under Dr. W. T. Green at Children's Hospital, Boston, Massachusetts, in November, 1948. Doctor Freede has just returned from a year's work in Orthopedic Surgery under Sir Reginald Watson-Jones at Oswestry, England.

The 59th Annual meeting of the Association of American Medical Colleges was held November 8, 9, 10, 1948, at White Sulphur Springs, Virginia. The University of Oklahoma School of Medicine was represented by Dr. Mark R. Everett, Dean of the School and by Dr. Homer F. Marsh, Dean of Students.

Dr. Bela Halpert and Dr. W. F. Keller attended the Second Annual Meeting of the College of American Pathologists in Chicago, October 1948. Dr. Halpert and Dr. Keller are Founding Fellows of the College. While in Chicago, they also attended the Annual meeting of the American Society of Clinical Pathologists.

President's Page

On November 2 the people of the United States in a democratic way selected their public servants for the coming four years. The United States will be great so long as each of us has the right by ballot to express our desires in government.

The medical profession has a greater responsibility than ever before in expressing leadership in the health field. The phrase "Public Relations" takes on a new meaning and our thinking in this field must be clear and concise and above all else progressive. Progressive must mean not the lowering of medical standards but their raising, not governmental domination or interference but a great opportunity for voluntary initiative to succeed whether in an organized or an unorganized way. The Art of Medicine must reach the level of the Science of Medicine and progress with it.

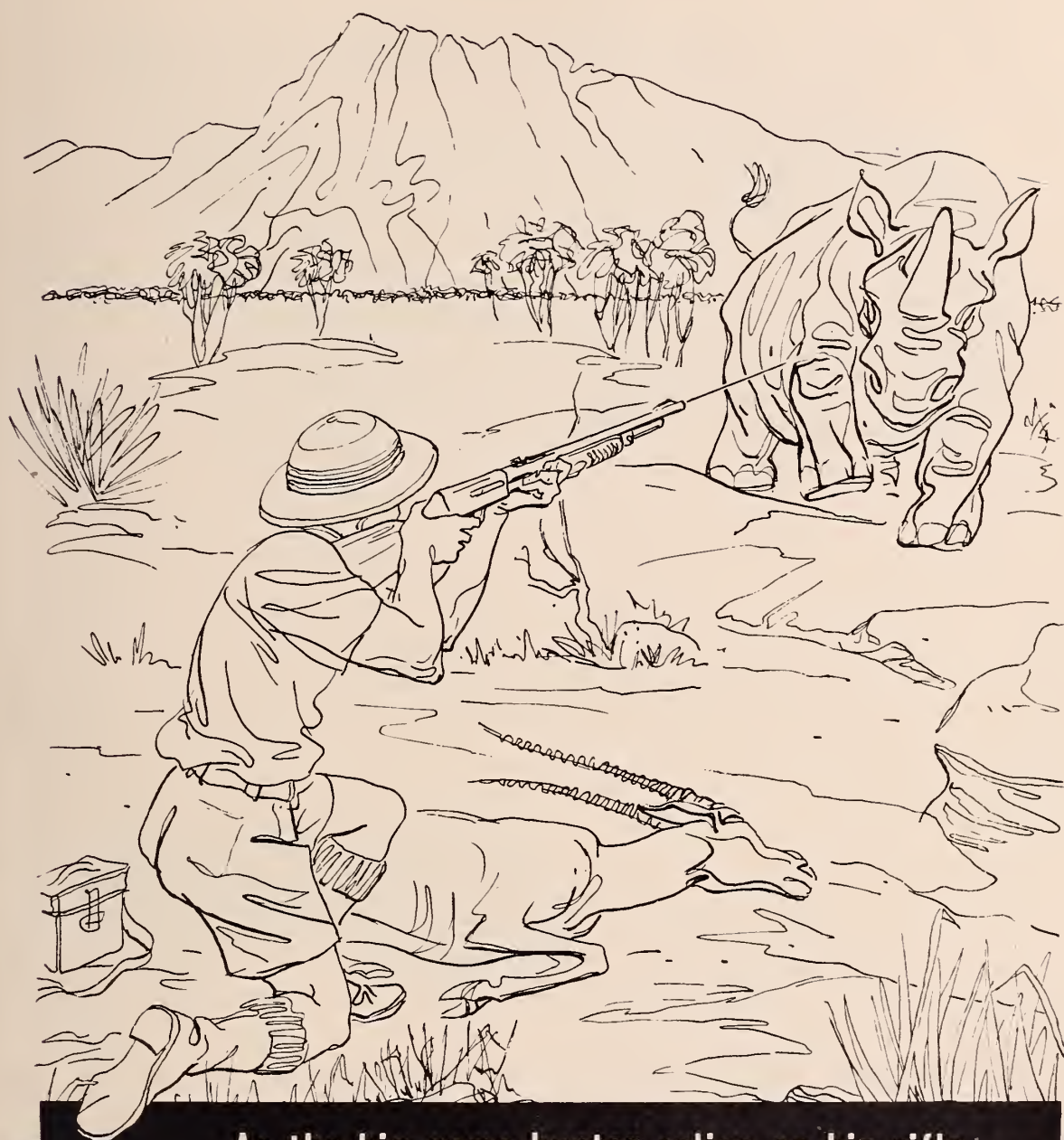
Public Relations for doctors is something new but very important. Of all our work this year, nothing should receive more thought than our Public Relations Program.

It is becoming at this time of the year to express appreciation to the Women's Auxiliary. They have helped organize our thinking and that of the public on all phases of the Public Relations Program. Our thanks go to them and to their State officers for the time and ability freely given. We wish them well in organizing more County Auxiliaries and in continuing their good work.

A Merry Christmas and Happy New Year to the Women's Auxiliary and to all members of the Oklahoma State Medical Association.

C. E. Northcutt

President.



As the big game hunter relies on his rifle...

So does the physician place his trust in the unfailing accuracy of each ethical preparation bearing this honored name . . .

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GENERAL NEWS

STUDENTS ENCOURAGED TO GO TO RURAL AREAS

An attempt is being made to assist the medical profession in the problem of supplying adequate medical care to the smaller towns and less densely populated areas of Oklahoma. One of the causes of the unequal physician supply is the tendency of recent medical graduates to locate in larger towns or to specialize, or both. Studies of the problem are now being made by a faculty committee whose chairman is Doctor Ernest Lachmau. Collaborating with this committee is an Alumni Association committee on student preceptorship, headed by Dr. J. William Finch of Hobart. The recommendations of these groups will be reported to the faculty and the Board of Regents for official action. The objective is to develop a workable method to acquaint senior medical students with general medical practice, and to help them realize the opportunities for such practice in Oklahoma.

One plan being considered is to add a two month preceptorship in addition to the nine academic months of the fourth year curriculum. These two months could be spent working with Oklahoma physicians who are practicing in the smaller cities and rural areas. The senior student could assist the physician and observe all phases of general medical practice. It is believed that such friendly contact would stimulate the student to greater interest in rural practice and encourage him to return to such communities after his internship.

A similar plan has been in operation in Wisconsin for several years, and has been satisfactory. First hand study of the Wisconsin program will be made before a plan for Oklahoma is submitted to the faculty.

A greatly revised curriculum for the junior and senior years was put into effect at The University of Oklahoma School of Medicine in September of this year. Under the new plan the number of formal lectures was reduced to no more than two hours per day. The medical student now spends the majority of his time studying patients in the wards and clinics of the University and affiliated hospitals. Instruction by the clinical faculty is given largely on an individual or small group basis. One of the features of the new curriculum is a daily conference conducted by various clinical departments. These conferences present the problems and modern methods of solution in all fields of medicine and therapeutics. The new curriculum is working well, and seems to offer each student more opportunity and stimulation to individual development than did the more formal lecture system.

REPRINTS AVAILABLE

For the convenience of physicians, the Society for the Prevention of Asphyxial Death, Inc. has reprinted the Woman's Home Companion article (August) entitled "Breath of Life." Copies of this reprint will be sent on request without charge. Address Secretary, S.P.A.D., Inc., 205 E. 78th St., N. Y. C.

O.S.M.A. REPRESENTED AT NATIONAL CONFERENCE

The fourth national conference of county medical society officers was held in connection with the A.M.A. interim session in St. Louis Tuesday, November 30. C. E. Northeutt, O.S.M.A. president, and executive office representatives Dick Graham and John K. Hart attended.

Topics discussed included the relation of the doctor to national preparedness and "The Public, The Doctor, and Socialized Medicine." Implications of the National Health Assembly and the Ewing report, facts from the Brookings Institute report, and results of European experiences were brought out by the speakers.

MEDICAL ASSISTANTS HAVE FIRST STATE MEET

Medical Assistants Society of Oklahoma had its first annual meeting October 9 and 10 in Tulsa at the Mayo Hotel with approximately 10 Oklahoma towns represented at the meeting.

Guest speakers at the banquet held Saturday night were V. K. Allen, M.D., president of the Tulsa County Medical Society, and Dick Graham, executive secretary O.S.M.A. Speakers at the business session were M. J. Searle, M.D., Jack O. Akins, M.D., R. E. Funk, M.D., and G. L. Kincaide, M.D.

Officers are Mrs. Wayne A. Hall, Tulsa, president; Mrs. Gladys Albright, Oklahoma City, first vice-president; Mrs. Nina Spears, Oklahoma City, second vice president; Mrs. Beunie McConnell, Tulsa, corresponding secretary; Mrs. Geneva Staunton, Oklahoma City, recording secretary; Miss Neta Chatfield, Tulsa, treasurer, and Mrs. Gloria Oliva, Oklahoma City, parliamentarian.

All girls who work for members of the O.S.M.A. are eligible to become members of the organization.

OKLAHOMANS ATTEND SOUTHERN MEDICAL

Several Oklahoma physicians attended the forty-second annual meeting of the Southern Medical Association held at Miami, Fla. October 25-28.

Carroll M. Pounders, M.D., Oklahoma, chairman of the S.M.A. council, reported to the delegates at the general session October 27. He was also chairman of the section on pediatrics.

Joseph W. Kelso, M.D., of Oklahoma City, addressed the group.

Mrs. Joseph W. Kelso, Oklahoma City, was installed as president of the Woman's Auxiliary of the S.M.A. at the meeting. Mrs. Ollie McBride, Ada, is a member of the board of councilors of the association.

States represented in the S.M.A. are Alabama, Arkansas, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia.



“...such as Metamucil...”*

For the treatment of the spastic colon the author suggests diet, elimination of the nervous element and “bulk producers.” As examples of these he lists “agar-agar, in finely powdered form, in flakes, or in cereal-like form; derivatives of psyllium seed, such as Metamucil”*



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*Glaske, W. H.: *Spastic Colon*, *M. Clin. North America* 26:805 (May) 1942.

†Council on Pharmacy and Chemistry: *New and Nonofficial Remedies*, 1947, Philadelphia, J. P. Lippincott Company, 1947, p. 320.

LIBRARY OF THE
COLLEGE OF PHYSICIANS

AWARDS MADE FOR FIFTY YEARS OF PRACTICE

Fifty years of service to their fellow men is the record achieved by the newest wearers of O.S.M.A. Fifty Year pins. The lapel buttons were presented in recent ceremonies to Floyd Warterfield, M.D., Muskogee, John Allison, M.D., Tahlequah, J. P. Torrey, M.D., Bartlesville, and Charles Sexton, M.D., Stillwater.

Dr. Warterfield, who was born in 1870, was graduated from the University of Arkansas School of Medicine in 1899. A fellow of the A.M.A., he is also a member of the American Urological Association. He was elected to honorary membership in the O.S.M.A. in 1945. Dr. Warterfield's pin was presented by C. E. Northcutt, M.D., president of the O.S.M.A., at a meeting of the eighth councilor district in Muskogee September 30.

At the Muskogee meeting a 50 year pin was also presented by Dr. Northcutt to John S. Allison, M.D., Tahlequah. Dr. Allison is a graduate of Vanderbilt Medical College in 1895. He practiced for two years in Uniontown, Ark. before completing work towards his degree. After practicing in Evansville, Ark. for several years, Dr. Allison moved to Tahlequah in 1910. Still in active practice in Tahlequah, Dr. Allison says that with all the equipment and laboratory facilities that are now available, some of his early day experiences seem unbelievable. He and another physician performed an operation on a hip for tubercular osteomyelitis with the kitchen table as the operating table and instruments sterilized in the dishpan on the kitchen stove. The operation was performed in 1900 and the patient is still alive and well. Although a "country doctor" Dr. Allison kept up with the newest developments in medicine through postgraduate work in general medicine and surgery at Polyclinic Hospital, Chicago; Postgraduate School, Chicago; Murphy Clinics at Murphy Hospital, Chicago; Tulane Medical School, New Orleans; and observations of surgery at Mayo Clinic, Rochester.

J. P. Torrey, M.D., 78-year-old Bartlesville physician, was presented his 50 year pin by Everett S. Lain, M.D., Oklahoma City, former president of the O.S.M.A. Dr. Torrey was born in Massachusetts and was graduated from the Harvard medical school in 1896. He practiced medicine in Mass. until he came to Oklahoma in 1915. He was on the staff of the University of Okla-

homa School of Medicine until 1920 when he moved to Bartlesville. Dr. Torrey was also presented a Life Membership and J. V. Athey, M.D., Bartlesville, was given a Life Membership certificate in the O.S.M.A.

Charles Sexton, M.D., Stillwater, received his 50 year pin at a meeting of the Payne County Medical Society in Stillwater October 21. One of the charter members of the Payne County Medical Society, he was born at Fountaintown, Ind. and attended National Normal University at Valparaiso, Ind. and took special work and pre-medical study at Tri State Normal school at Angola. In the spring of 1898, he was graduated from the Medical College of Indiana and took postgraduate courses in Chicago and St. Louis, Mo. He practiced at Greenfield, Ind. and came to Oklahoma in January of 1900 and practiced in Perkins and vicinity until 1908 when he moved to Stillwater. In the fall of 1908 he was elected to the Oklahoma legislature and served in the 1909 session and also in the special session of 1910. He was a medical officer in World War I and one of the charter members and the first post commander of Carter C. Hanner Post 129 of the American Legion. After returning from the war he was appointed and served as assistant surgeon, U.S. Public Health Service. Later when the V.A. was organized he was transferred to that service. He was the first president of the medical staff of the Payne County Masonic Hospital at Cushing and was also first president of the medical staff of Stillwater Municipal Hospital in Stillwater. He is an honorary member of the O.S.M.A., a 32nd. degree mason and is also active in other civic and medical organizations.

HONORARY AND LIFE MEMBERSHIPS

Life Membership Certificates in the O.S.M.A. recently presented in addition to those given at the ceremonies awarding 50 year pins include the award presented to H. M. Reeder, M.D., Kona wa. Dr. Reeder's certificate was given at a ceremony of the Seventh Councilor District at the Aldridge Hotel, Shawnee.

O. E. Howell, M.D., veteran Cleveland and McClain County physician, was recently presented an honorary membership certificate by George Garrison, M.D., Oklahoma City, president-elect of the O.S.M.A.

Lower left, John Allison, M. D. receives his 50 year pin from President Northcutt while Floyd Warterfield, M.D., also a 50 year doctor, looks on. Center, President-elect George Garrison presents O. E. Howell with his honorary membership certificate. Right, J. P. Torrey, M.D., receives his pin from former O.S.M.A. President E. S. Lain. Dr. Torrey, also received a life membership certificate as did J. V. Athey, who is shown at the right in the picture with Drs. Lain and Torrey.



RADIO SUB-COMMITTEE

The radio sub-committee of the Oklahoma State Medical Association met October 24 when a report was given by the Woman's Auxiliary on a preliminary survey which indicated that the "Tell Me Doctor" radio series is being received favorably by the general public. It is now planned to further expand the program with the hope that it can be made available to any radio station desiring to broadcast it. At the present time it is being broadcast by Oklahoma City (KOCY), Tulsa (KTUL), Ada, Stillwater, Durant, Duncan, Ponca City, Bartlesville, Miami, and Enid stations.

WNAD INAUGURATING HEALTH EDUCATION SERIES

Several new series of broadcasts dealing with health and health education are now being broadcast over radio station WNAD, Norman.

"For the Record" is the title of the series initiated by the O.U. student health service, according to James O. Hood, M.D., director. The programs will follow the experience of two freshmen, "Betty Coed and Joe College." The programs are presented at 9:30 a.m. every Friday.

The "Melody of Life" series is a new approach to health education and is broadcast at 4:15 p.m. on Mondays in cooperation with the Cleveland County Medical Society. Transcriptions, which will present music and life stories of famous composers who were victims of disease, are furnished by the A.M.A.

A roundtable discussion of activities of the State Department of Health was broadcast October 13 with the following participants, Grady F. Mathews, commissioner of health; Walter Billingley, Wewoka, chairman of the health and welfare committee of interim legislative council; Charles R. Ronntree, M.D., president of the state board of health and Floyd Harrington, director of the division of accounting and personnel, state department of health.

Left, Bruce Hinson, M.D., Enid, presenting 50 year pin to C. E. Sexton, M.D., Stillwater, Oct. 21, 1948 at Stillwater, Okla.



VETERANS MEDICAL CARE CONFERENCE HELD

A conference concerning operation of the Veterans Medical Care Program was held in Oklahoma City October 2 and 27.

Those present were T. M. Lowery, M.D., Chief, outpatient division, branch office nine, Veterans Administration, St. Louis; Leroy Sadler, M.D., Oklahoma City, chairman O.S.M.A. veterans medical care committee; George Riggs, M.D., Muskogee, acting medical director of the V.A. branch office at Muskogee; Charles Robinson, M.D., chief medical officer, V.A. Oklahoma City branch office; Emery Gayle, assistant manager, Oklahoma City regional office.

Plans were made for activating the medical advisory committee members of which have been appointed from the membership of the association for each of the regional offices (Muskogee area and Oklahoma City area). It is planned for these committees to be of assistance in helping solve problems of administration of the program both as to the V.A. and as to the individual doctors of medicine who are participating.

WOMEN PHYSICIANS MEET IN OKLAHOMA

Women physicians from throughout the United States convened in Oklahoma City for a three day meeting beginning October 21. Those present were members of Alpha Epsilon Iota, women's medical fraternity. All members are in medical practice or enrolled in a grade A medical school. Leila Andrews, M.D., Oklahoma City, past grand president of the association, presided at several sessions.

Ernest Lachman, M.D., chairman of the anatomy department, University of Oklahoma School of Medicine, spoke at the Friday luncheon and H. Violet Sturgeon, M.D., Hennessey, vice-president of the O.S.M.A. was principal speaker at the clinical session Saturday morning. Dr. Lawrence Snyder, dean of the O.U. graduate school, was the banquet speaker Friday night.

FINAL DIAGNOSIS IS GIVEN

For the benefit of those who were not able to stay and listen to the entire Clinical Pathological Conference at the Oklahoma City Clinical Society, the final diagnosis was amebiasis with abscess in the liver finally causing perforation and peritonitis, Ben H. Nicholson, M.D., Director of Clinics, reports.

While the diagnosis presented by both guest speakers was beautifully arrived at, it was incorrect with *Endamoeba histolytica* as the correct diagnosis.

The Oklahoma City Clinical Society, held October 25-28 was well attended with 1,329 registered. Held in Oklahoma City, it was the eighteenth annual fall conference.

COUNCIL MEETING SET

The Council of the O.S.M.A. will meet in Oklahoma City at the Executive Offices December 12 to take up routine administration and policy matters and discuss medical problems which will be occasioned by the 1949 session of the Oklahoma Legislature. Also consideration of plans for the Annual Meeting in Tulsa in May will be discussed by the Council.

LICENSING LAW IS INTERPRETED

When the County Officers conference was held in Oklahoma City Sept. 19, one of the principal addresses was delivered by Paul A. Snelson, director, hospital division, Oklahoma State Department of Health.

Speaking on "Interpreting the Licensing Law," Mr. Snelson pointed out that the need of such legislation became clearly apparent as the Hill-Burton bill approached final approval by Congress. By the terms of that bill each state desiring to participate was required to provide minimum standards for hospital maintenance and operation. The Oklahoma licensure law, H. B. 478 of the 20th Oklahoma legislature, follows very closely the model bill drafted through the co-operative efforts of the following agencies: Council of State Governments, American Hospital Association, Catholic Hospital Association, American Protestant Hospital Association, American Medical Association, National Nursing Council, American Public Welfare Association, American Public Health Association, U. S. Public Health Service, Office of the General Council, Federal Security Agency.

He also explained that a number of states now having experience with the administration of hospital licensing most commonly agree that the function of licensure is primarily to improve patient care in a gradual rather than in an abrupt manner. It should be emphasized that licensing and the administration of the licensing law are considered as a long range program, the operation of which is educational in nature. An attempt is being made to permit those hospitals which are now sub-standard in the line of present day accepted standards for safe, efficient and adequate patient care to make such changes as are necessary to bring them into compliance.

It is believed that such administration will better serve the common good than would an immediate and rigid enforcement of any licensing law. The experience of the hospital division, Oklahoma State Department of Health, clearly indicates that licensing is desirable and the attitude of hospital administrators shows a willingness on their part to promote, encourage and assist in such a program. Results of four regional conferences indicate that the pattern Oklahoma has adopted for the administration of the licensing law is similar to that now in operation in other states and will be approved generally in most of the remaining states.

Mr. Snelson called attention to the fact that licensing of hospitals is peculiar in that the problems are so different from those involved in the licensing of many other establishments which do not offer and provide such an indispensable service. The hospital division well recognizes that failure to license the hospital or force closure for failure to conform to standards may work an undue hardship on the community involved. Under the state law the commissioner of health is empowered to revoke or suspend hospital licenses for the following causes: 1. Violations of any of the provisions of this Act or the rules and regulations issued pursuant thereto, 2. permitting, aiding or abetting the commission of any illegal act in the institution, 3. conduct or practices deemed by the state commissioner of health to be detrimental to the welfare of the patients of the said institution.

The law also provides the commissioner with the authority to issue licenses to hospitals and related institutions which are found to comply with the provision of the act and any regulations lawfully promulgat-

ed by the commissioner. The law further provides for the collection of a nominal license fee which, however, is not sufficient to finance the administration of the program. In those cases in which licenses are refused the institution is immediately notified and is informed of the reasons for such refusal. Further action on issuance of a license is not taken until evidence has been submitted that the deficiencies have been corrected.

HALPERT SPEAKS ON CANCER

Bela Halpert, M.D., Professor of Clinical Pathology, of the University of Oklahoma School of Medicine was the speaker at the November meeting of the Society of Sigma Xi of the University of Oklahoma. His subject was "Morphologic Aspects of Cancer Research" and his talk was illustrated with lantern slides selected from his own research work. The meeting was held November 18, 1948, in the auditorium of the School of Medicine.

Dr. Halpert emphasized that the knowledge of the nature of cancer is hardly a century old, and that the bulk of the scientific information has been acquired in the last 50 years.

He defined cancer as an atypical growth derived from cells of the individual. There are two lines of cancer investigation, experimental and clinical. The latter is concerned with human cancer. The existence and nature of a neoplasm are established by microscopic examination. The result of such an examination is paramount in determining the method of treatment.

He pointed out that the scientific study of human cancer requires the cooperation of patients and coordination of a team of physicians. Such cancer teams are operating in most large hospitals, particularly those connected with medical schools. The laboratory of each hospital which cares for cancer patients is a potential center for cancer research.

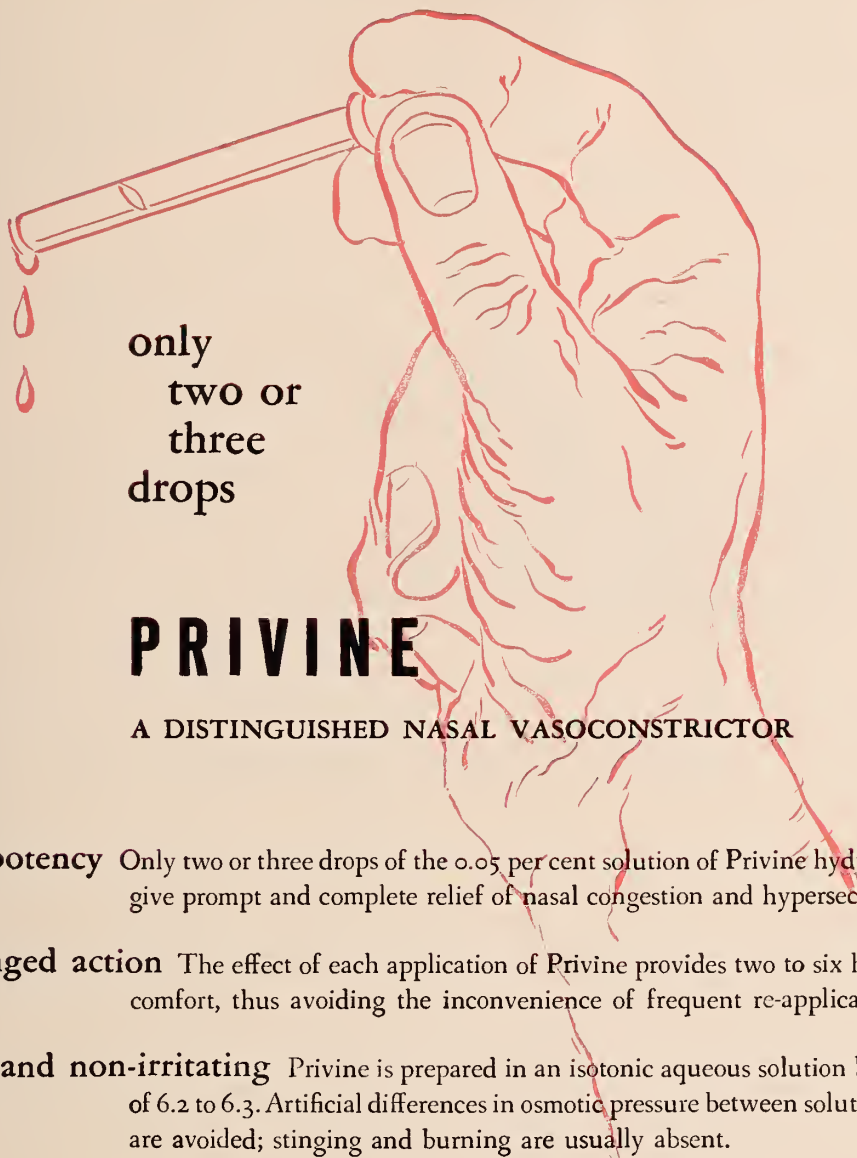
Dr. Halpert believes that cancer is on the increase because more people are alive in the sixth and seventh decades. Complete protection from cancer is apparently impossible, because there are so many carcinogens that they cannot all be avoided.

Cancer should be looked upon as any other disease. It should be diagnosed as early as possible and treated in the best manner available.

O.S.M.A. PARTICIPATES ON CONFERENCE PROGRAM

C. E. Northcutt, M.D., president, O.S.M.A., gave the welcome address at the South Central Regional Conference sponsored by the A.M.A. Council on Medical Service and the Arkansas, Kansas, Louisiana, Missouri, Oklahoma and Texas medical associations. The conference was held in Tulsa November 13 and 14.

George Garrison, M.D., Oklahoma City, represented the O.S.M.A. at the roundtable "What We Expect from the A.M.A. and the Council on Medical Service." James Stevenson, M. D., Tulsa, was moderator for the discussion of the National Health Assembly and the Ewing report and what it will mean to the profession and the public. Another Oklahoman on the program was Mr. John I. Taylor, Mountain View, president of the Oklahoma Farm Bureau Federation. In the open question and answer period following the reports of the state associations rural health committees, Ned Burleson, M.D., Prague, represented the Oklahoma delegation.



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ANNOUNCEMENTS

American Academy of General Practice. First annual scientific assembly, Netherlands Plaza hotel, Cincinnati, March 7, 8, 9.

Colorado State Medical Society. Annual session, September 20 to September 23, 1949, Shirley-Savoy Hotel, Denver.

University of Oklahoma Postgraduate Course in Pediatrics. December 6, 7 and 8. Guest faculty: Russell J. Blattner, M.D., professor of pediatrics, Baylor University School of Medicine, Houston, Texas; and Preston A. McLendon, Professor of Pediatrics, George Washington University School of Medicine, Washington, D.C.

Chicago Medical Society. Fifth annual clinical conference, Palmer House, March 1, 2, 3 and 4. Reservations should be made direct with the Palmer House.

Southwest Allergy Forum. Meeting will be held in El Paso, April 4 and 5, 1949.

Postgraduate Course in Endocrinology. The Postgraduate committee of the Association for the Study of Internal Secretions announces a course of lectures and demonstrations in clinical endocrinology, Skirvin Hotel, Oklahoma City, Feb. 21-26, inclusive. Inquiries and applications should be sent to Henry H. Turner, M.D., chairman of the postgraduate committee, 1200 North Walker, Oklahoma City 3, Oklahoma.

ENDOCRINOLOGY COURSE TO BE GIVEN IN STATE

The postgraduate committee of the Association for the Study of Internal Secretions, under authority of the council, announces a course of lectures and demonstrations in clinical endocrinology, to be held in Oklahoma City at the Skirvin Hotel, February 21 to 26 inclusive.

The faculty will consist of the most prominent investigators and clinical endocrinologists in the various branches of the medical sciences in the U.S. and Canada. It is planned to be of interest and value to both the general practitioner and the specialist.

A fee of \$100 will be charged for the entire course and the attendance will be limited to 100. Registration will be in the order of checks received. Applications should be made on your letterhead and forwarded, with your check, to Henry H. Turner, M.D., chairman of the postgraduate committee, 1200 North Walker, Oklahoma City 3, Oklahoma.

All applicants are asked to make their hotel reservations early because of other meetings being held in Oklahoma City at the same time. Several of the downtown hotels in Oklahoma City are Biltmore, Black, Huckins, Skirvin, Skirvin Tower, Wells-Roberts.

O.S.M.A. CALENDAR

Nov. 27-Dec. 3—A.M.A. Interim Session, St. Louis.

December 6, 7, 8—Postgraduate Course in Pediatrics, University of Oklahoma School of Medicine.

Dec. 8—Oklahoma Society for Crippled Children meeting, Oklahoma City.

Dec. 12—O.S.M.A. Council Meeting, Executive Offices, O.S.M.A.

Jan. 15—Oklahoma City Obs.-Gyn. Society, meeting in Oklahoma City.

POSTGRADUATE COURSE TO RECESS CHRISTMAS

Postgraduate lectures in gynecology, circuit nine, will be recessed the last two weeks in December, it has been announced.

Lectures will be resumed January 3. Teaching centers in circuit nine are Oklahoma City (colored) Monday night, Clinton Tuesday, Watonga Wednesday, Guthrie Thursday, and El Reno Friday. Instructor is J. R. B. Branch, M.D.

The postgraduate committee plans to open the two-year course in internal medicine shortly after the first of the year.

ADVISORY COMMITTEE FORMED FOR CHILDREN'S BUREAU

Forty spokesmen for the producers and consumers of health services for mothers and children met in Washington, D. C., recently to form an advisory committee to the U.S. children's bureau on federal-state programs for maternal and child health and crippled children's services. The children's bureau is a unit in the Social Security Administration, Federal Security Agency. Harry H. Gordon, M.D., professor of pediatrics, University of Colorado Medical Center, was elected chairman of the committee for three years.

Members include: 1. officially designated representatives of medical, nursing, hospital, dental, medical social work, physiotherapy, and dietetic associations; 2. representatives of voluntary health agencies; leaders in labor, farm, women's and veterans groups; 4. specialists from graduate schools in medicine and allied sciences; and other distinguished citizens.

More disabled veterans are taking on-the-farm training than on-the-job training, Veterans Administration office records at St. Louis show.

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1. Lennox, W. C. (1947), Tridione in the Treatment of Epilepsy, *J. Amer. Med. Assn.*, 134:138, May 10. 2. Merritt, H. H. (1947), Recent Advances in the Treatment of Epilepsy, with Particular Emphasis on the Use of Tridione, *Arch. Neural. & Psychiat.*, 57:130, Jan. 3. Gibbs, F. A. (1947), New Drugs of Value in the Treatment of Epilepsy, *Annals Int. Med.*, 27:548, Oct. 4. Fetterman, J. L., and Weil, A. A. (1947), Practical Aspects of Epilepsy (with special consideration of epilepsy in children), *Med. Clin. N. America*, 31:1273, Sept. 5. Liebert, E. (1947), Treatment of Neurological Disorders with Tridione, *Ill. Med. J.*, 91:311, June.

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HAVE YOU HEARD?

Minard F. Jacobs, M.D., Oklahoma City, has been appointed a member of the advisory board of the Mayo Foundation alumni association of residents and ex-residents.

Charles W. McClellan, M.D., announced the opening of his offices at 215 First National Bank Building, Colorado Springs, Colo.

H. H. Macumber, M.D., Chickasha, spoke on socialized medicine at the meeting of the St. Joseph's academy P.T.A. meeting recently.

F. R. First, Jr., M.D., Checotah, received the appointment as division surgeon for the Katy railroad.

Fred T. Foard, M.D., of the U.S. Public Health Service has been appointed to succeed Ralph B. Snively, who retired as director of health, Bureau of Indian Affairs.

David W. Gillick, M.D., chief medical officer of the Talihina Indian hospital, was principal speaker at a recent meeting of the McAlester Lions club.

Arthur W. Hoyt, M.D., Chickasha, spoke on Child Diseases at the regular meeting of the Chickasha Rotary club recently.

O. G. Bacon, M.D., Frederick, has moved into new offices and has announced the new offices will be completely equipped.

J. R. B. Branch, M.D., postgraduate instructor in gynecology, attended the American Cancer Society meeting in New York City the week of November 1.

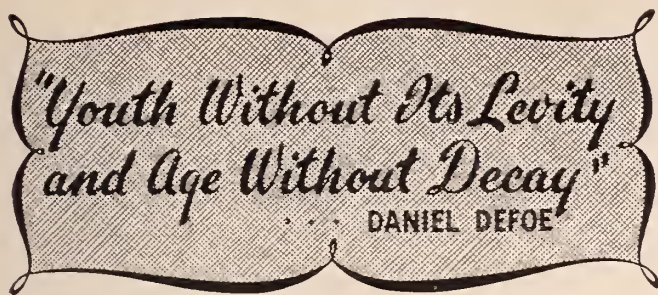
R. C. Dodson, M.D., assistant professor of surgery at the University of Oklahoma School of Medicine lectured at the Veterans' hospital in Muskogee.

G. E. Johnson, M.D., Ardmore, attended a meeting in Springfield, Mo. of Frisco railroad surgeons.

J. P. Braun, M.D., spoke on "My Hobby" at the Hobart Kiwanis club.

DO YOU KNOW?

Ten Oklahomans were elected to the American College of Surgeons at the meeting of the group in Los Angeles. Those named were Floyd A. Bartheld, M.D., McAlester; Arthur L. Buell, M.D., Shattuck; Edward N. Farris, M. D., Oklahoma City; W. Carl Lindstrom, M.D., Tulsa; Edward L. Moore, M.D., Tulsa; Joe M. Parker, M.D., Oklahoma City; Averill Stowell, M.D., Tulsa; George M. Tulloch, M.D., Okmulgee; Tom L. Waiuwright, M.D., Oklahoma City and Charles H. Wilson, M.D., Oklahoma City. Ralph W. Rucker, M.D., Bartlesville, now deceased, was also on the Oklahoma membership list.



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BOOK REVIEWS

WAR POLITICS AND INSANITY. C. S. Bluemel, M.A., M.D., F.A.C.P., M.R.C.S. (Eng.) Denver. The World Press, Inc., 1948. 121 pages.

This little book in which the psychiatrist looks at the politician is very interesting and frankly speaking, it is very depressing. The author refers to his experience with defeated politicians after the national election of 1932. Their behavior, including mental breakdown and suicidal impulses caused him to pose the following questions, "What was the matter with politicians as a group? Were they manic-depressive? Were they hypomaniac? Were they constitutional inferiors?"

He goes on to state that having had "ample opportunity to ponder these questions and to study the problem in its broader aspects" he asks, "why does a man become a politician?" In the book all these and many other questions are discussed and as might be expected, the majority of the answers are unsatisfactory. This latter discouraging statement should not disturb the reader's interest or minimize the importance of the subject matter and the suggested remedial safeguards.

The introduction lists many of the world's leaders of men and with their heartless titles connoting ruthless methods under the cruel protection of power. It closes by calling attention to the present postwar strife and pointing out the fact that the conflict is not one of interests but of personalities.

In the first chapter he discussed the cause of war and closes by saying, "It is the dominant leader and not the submissive follower who directs the course of events." He discusses the "dominance in the animal world" and shows how much more animal we are than the animals themselves. In other words we clothe ourselves in animal behavior by design. This comes out in the chapter dealing with the "obsessive-compulsive reaction." Even an evil obsession without compulsion may be harmless unless motivated by an urge which inflicts it upon society. Many interesting examples are presented.

"The common disorders of personality" are discussed and the danger of even psychosis passing without recognition until great damage is done. Also the danger of oncoming senility even in respected time tried public servants. Hindenburg's second term as president of Germany is cited as an example. The events of history turn dangerously upon personality disorders. It may not be possible to make an exact psychiatric diagnosis in the case of an abnormal political leader but the

menace of his personality is great if he manifests both obsessive traits and dynamic drive. The object is to help identify psychological traits which bring a man to power and to discover a formula which might protect the people from its abuses.

Under "Components in Personality Disorder" the appraisal of examples such as Hitler, Mussolini and Stalin is most interesting. The chapter on "Psychiatry and History" is well worth a careful reading though it does not leave one refreshed or reassured.

The vulnerability of democracy and the danger from the obsessive, compulsive, super charged politician who elbows his way to power where his exhibitionistic propensities cause him to strut with his peacock ego is discussed in a most interesting banner. The author warns that in spite of a popular belief there is nothing in the principles of democracy to assure eternal peace. Carlyle contended that if nine men out of 10 are fools, then it is impossible for the ballot box to grind wisdom from their votes. Will Durant is quoted as having seen "the contending candidates as the twin characters Tweedledum and Tweedledee. When both candidates are politicians, no wise choice is available to the electorate." H. L. Mencken is quoted as having said of the politician, "His business is never what it pretends to be. Ostensibly he is an altruist devoted wholeheartedly to the service of his fellowmen, and so abjectly public-spirited that his private interest is nothing to him. Actually he is a sturdy rogue whose principle and often sole aim in life is to butter his parsnips."

The last chapter deals with "The Future of Democracy" and suggests a selective form of government which if perfected would eliminate many of the hazards discussed in the book.

YOUR BABY (*The Complete Baby Book for Mothers and Fathers*). Gladys Denny Shultz, Contributing Editor, Ladies Home Journal, and Lee Forrest Hill, M.D., former president, American Academy of Pediatrics. 278 pages. \$3.50. Doubleday and Co., Inc., Garden City, N. Y., 1948.

This is a beautifully written and illustrated book which proves that parenthood is fun! The authors state that this is the first book to recognize that babies have two parents — and that father, too, needs some instruction. It is thoroughly readable, complete and easy to understand.

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BOOK REVIEWS, (Continued)

Everything is covered — from the time pregnancy is first suspected, through birth, infancy, and up to the time the child reaches school age. There are nine chapters and their titles are more or less self-explanatory: A Baby on the Way; To Help You Enjoy Your Baby; The Right Start is So Important; What to Do Each Month; The Vital Second Year; Managing Your Run-around; The Preschool Years; Formulas and Recipes; and Ailments and Accidents.

The authors answer a million questions, so to speak, in language which the mother and father can easily comprehend, viz.: Pregnancy tests — what do Rh positive and negative mean?; why do babies cry?; is rigid feeding schedule good?; sleeping habits; how to avoid the "eating problem;" proper footwear; bed-wetting; thumb-sucking; how to select an obstetrician; etc.

A special feature of the book is the picture section, in which important instructions are illustrated by photographs and drawings. And there's a record section which, when filled in, will make this book a treasured personal history of the baby's early years.

A review which attempted to list all of the problems discussed would be much too long, but suffice it to

say, the book is very cleverly written and should be a "must" for the couple who say, "We are pregnant!"

—J. W. Morrison, M.D.

ABC'S OF SULFONAMIDE AND ANTIBIOTIC THERAPY. Perrin H. Long, M.D., Professor of Preventive Medicine, Johns Hopkins University. 231 pages, W. B. Saunders Company, 1948.

The purpose of this book is to provide concise, up-to-date, easily available information concerning chemotherapy in the treatment of infectious processes. Only antibiotics of proved value have been included.

In the first section, the clinical pharmacology, toxicity, and methods of administration of these substances are discussed, as well as other general aids to the employment of sulfonamides and antibiotics. The remainder of the book lists all diseases or infectious processes separately in alphabetical order and there is a brief (but adequate) discussion of each under the headings: etiology, specific therapy, auxiliary therapy and comment.

The book should be helpful to senior medical students, internes, and to the active general practitioner. However, its clarity and conciseness serves as a ready reference.—J. W. Morrison, M.D.

OBITUARIES

M. A. HOUSER, M.D. 1878-1948

Mortimer A. Houser, M.D., Tulsa, died June 20, 1948 after a short illness. He was 70 years old and had practiced in Tulsa since 1904.

Dr. Houser received his medical degree from Milwaukee Medical College in 1903 and after several months practice in Pawhuska, moved to Tulsa. He was former chief of staff at Hillcrest Memorial Hospital, Tulsa.

Surviving is his widow, Mrs. Jennie Houser.

BERNARD L. BRANLEY, M.D. 1900-1948

Bernard L. Branley, M.D., 48, died in Tulsa August 29, 1948, after an illness of several months.

He was born at Melrose, Minn. and was educated at

the University of Minnesota, Minneapolis, where he received his medical degree in 1947. He interned at Philadelphia General Hospital and came to Tulsa in 1929.

During World War II, Dr. Branley served in the United States Naval Medical Corps. He was commanding officer of the navy hospital at Corpus Christi, Texas, and was later transferred to active duty in the South Pacific. He was discharged in 1946 as a Commander after serving four years. His last assignment was with medical units aboard the U.S. aircraft carrier Lexington.

A member of the Tulsa County Medical Society and other medical organizations, Dr. Branley was at one time County Superintendent of Health. He was a member of the staff of St. John's hospital.

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KEY TO ABBREVIATIONS

(S)—Scientific Article
(E)—Editorial
(SP)—Special Article
(A)—Announcements
(BR)—Book Reviews

(ABS)—Abstract
(O)—Obituary
(PIC)—Picture
(GN)—General News

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OKLAHOMA CITY OBSTETRICAL AND GYNECOLOGICAL SOCIETY

Second Annual Postgraduate Review—January 15, 1949

UNIVERSITY HOSPITAL

Operative and Dry Clinics by Departments of Obstetrics and Gynecology
University of Oklahoma School of Medicine

OPERATIVE

Department of Gynecology

8:00—Abdominal Hysterectomy
Dr. Grider Penick

8:00—Vulvectomy
Dr. Henry Bennett

8:00—Utero-Ovarian Suspension
Dr. Gerald Rogers

9:30—Vaginal Hysterectomy
Dr. Joseph W. Kelso

9:30—Vaginal Plastic Procedures
Dr. LeRoy Sadler

9:30—Ovarian Tumor

Dr. John F. Kuhn, Jr.

Department of Obstetrics

8:00—Caesarian Section
Dr. John W. Records

8:30—Caesarian Section
Dr. J. M. Parrish, Jr.

8:00-11:00—Vaginal Delivery (if patient available)
Dr. James B. Eskridge

DRY CLINICS

8:00—Manequin Demonstrations — Forceps — Breech
Dr. E. P. Allen
Dr. George Allen
Dr. W. W. Wells

8:00—1:00—X-ray Diagnosis—Obstetrics and Gynecology
Dr. Milton J. Serwer
Dr. Thomas Points

8:00—11:00—Office Procedures in Obstetrics and Gynecology
Dr. LeRoy Sadler — Director
Cancer Detection — Dr. Walter Hartford
Diagnosis and Treatment of Vaginitis and Cervicitis — Dr. Hugh Jones
Fertility Investigation — Dr. Harry Harris
Office Obstetrics — Dr. Floyd Gray and Dr. Brunel Faris

NOON ROUND TABLE LUNCHEON

SKIRVIN HOTEL

Distinguished Guest Speaker

DR. JAMES P. GREENHILL

Professor of Gynecology — Cook County Graduate School
Co-author, DeLee's, "Principles & Practice of Obstetrics"

Editor of Year Book, "Obstetrics & Gynecology"
Chicago, Illinois

AFTERNOON PROGRAM

SKIRVIN HOTEL

2:00 p.m.

Common Lesions of the Cervix and Their Management
Dr. Joseph W. Kelso

Prolonged Labor — "Do's and Don'ts"
Dr. Robert D. Anspaugh

Postoperative Care of Gynecologic Patients
Dr. Grider Penick

Modern Concepts in Therapy of Toxemia of Pregnancy
Dr. Delbert Smith

PANEL DISCUSSION

Dr. Henry Bennett—Moderator
Dr. James P. Greenhill
Dr. Grider Penick
Dr. James B. Eskridge

6:30 p.m.—Cocktails—Skirvin Hotel
Bring your wife!

7:30 p.m.—Annual Dinner
Dr. James P. Greenhill—Guest Speaker

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FIFTH CHICAGO MEDICAL SOCIETY ANNUAL CLINICAL CONFERENCE

March 1, 2, 3, 4, 1949

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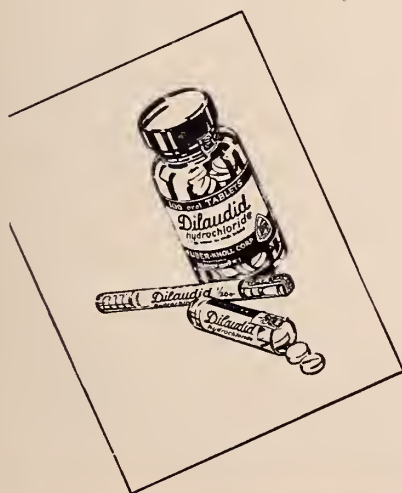
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World War II veterans receiving compensation for malaria incurred in service declined from 130,000 in June, 1947, to 32,000 in March, 1948.

The Veterans Administration has more than 100,000 veterans in VA hospitals and homes in the United States.



middle age + *mental ease*

The woman in the climacterium may be disturbed by disquieting thoughts and foolish fears. Such mental anguish is oftentimes allayed when the physical symptoms associated with declining ovarian function have been relieved.

"Premarin," by bringing about remission of menopausal symptoms, restores mental ease in a majority of instances. Furthermore, there is a "plus" in "Premarin"...the gratifying "sense of well-being" usually experienced by the patient following administration of this naturally occurring, orally active estrogen.

Flexible dosage regimens to adapt treatment to the particular needs of the patient are made possible with "Premarin" Tablets of 2.5, 1.25, or 0.625 mg., and liquid—0.625 mg. per 4 cc. (one teaspoonful).

While sodium estrone sulfate is the principal estrogen in "Premarin," other equine estrogens...estradiol, equilin, equilenin, hippulin...are probably also present in varying amounts as water soluble conjugates.

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CONJUGATED ESTROGENS (equine) *

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*Estrogenic Substances (water soluble) also known as Conjugated Estrogens (equine)

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OFFICERS OF COUNTY SOCIETIES, 1948

COUNTY	PRESIDENT	SECRETARY	MEETING TIME
Alfalfa.....	L. T. Lancaster, Cherokee	C. E. Cook, Cherokee	Last Tues. each Second Month
Atoka-Bryan-Coal- Johnston.....	Charles D. Dale, Atoka	A. T. Baker, Durant	Second Tuesday
Beckham.....	T. J. McGrath, Sayre	J. B. McGolrick, Erick	Third Thursday
Blaine.....	Fred Perry, Okeene	Virginia Curtin, Watonga	Third Thursday
Caddo.....	Joseph Henke, Hydro	Edward T. Cook, Jr., Anadarko	Subject to Call
Canadian.....	J. N. Goldberger, El Reno	Jack W. Myers, El Reno	Second Tuesday
Carter.....	C. D. Cunningham, Ardmore	Roger Reid, Ardmore	First Tuesday
Cherokee.....	P. H. Medearis, Tahlequah	R. K. McIntosh, Jr., Tahlequah	
Choctaw-McCurtain- Pushmataha.....		Fred D. Switzer, Hugo	Fourth Thursday
Cleveland.....	Phil Haddock, Norman	James F. Hohl, Norman	Second Tuesday
Comanche.....	Byron W. Aycock, Lawton	E. Stanley Berger, Lawton	Third Friday
Cotton.....	G. W. Baker, Walters	Mollie Scism, Walters	
Craig.....	C. P. Chum'ey, Vinita	J. M. McMillan, Vinita	Second Tuesday
Creek.....	P. K. Lewis, Sapulpa	Louis A. Martin, Sapulpa	Third Thursday
Custer.....	J. G. Wood, Weatherford	Floyd Simon, Clinton	Fourth Thursday
Garfield.....	J. Wendell Mercer, Enid	Roscoe C. Baker, Enid	Wed. before 3rd Thur.
Garvin.....	Carl Steen, Pauls Valley	John R. Callaway, Pauls Valley	
Grant.....	I. V. Hardy, Medford	F. P. Robinson, Pond Creek	
Grady.....	L. E. Woods, Chickasha	Wesley W. Davis, Chickasha	
Greer.....	Fred Sellers, Mangum	J. B. Hollis, Mangum	First Wednesday
Harmon.....	R. H. Lynch, Hollis	C. N. Talley, Hollis	
Haskell.....	William S. Carson, Keota	N. K. William, McCurtain	First Friday
Hughes.....	L. A. S. Johnston, Holdenville	Paul Kernek, Holdenville	Last Monday
Jackson.....	J. P. Irby, Altus	C. L. Tefertiller, Altus	Second Monday
Jefferson.....	H. A. Rosier, Waurika	O. J. Hagg, Waurika	Second Thursday
Kay-Noble.....	Glenn Kreger, Tonkawa	E. C. Mohler, Ponca City	
Kingfisher.....	H. Violet Sturgeon, Hennessey	Henry C. Trzaska, Hennessey	
Kiowa.....	R. F. Shriner, Hobart	J. B. Tolbert, Mt. View	
LeFlore.....	John H. Harvey, Heavener	Rush L. Wright, Poteau	First Wednesday
Lincoln.....	Jack Mileham, Chandler	C. W. Robertson, Chandler	Last Tuesday
Logan.....	E. W. Lehw, Guthrie	J. L. Lehw, Guthrie	
Mayes.....	E. H. Werling, Pryor	Paul B. Cameron, Pryor	
McClain.....	I. N. Kolb, Blanchard	W. C. McCurdy, Jr., Purcell	Third Thursday
McIntosh.....	J. Howard Baker, Jr., Eufaula	W. A. Tolleson, Eufaula	
Muskogee-Sequoyah- Wagoner.....	George L. Kaiser, Muskogee	Eugene M. Henry, Muskogee	First Tuesday
Northwestern.....	Joe L. Duer, Woodward	C. W. Tedrowe, Woodward	2nd Thurs. Even Mo.
Okfuskee.....	A. S. Melton, Okemah	M. L. Whitney, Okemah	
Oklahoma.....	W. W. Rucks, Jr., Oklahoma City	John F. Kuhn, Oklahoma City	Fourth Tuesday
Okmulgee.....	J. C. Matheney, Okmulgee	Mrs. Muriel Waller, Exec. Secty.	Second Monday
Osage.....	C. S. Stotts, Pawhuska	S. B. Leslie, Jr., Okmulgee	Third Thursday
Ottawa.....	F. L. Wormington, Miami	William A. Loy, Pawhuska	Second Thursday
Payne-Pawnee.....	Clifford M. Bassett, Cushing	W. Jackson Sayles, Miami	Third Friday
Pittsburg.....	Homer C. Wheeler, McAlester	C. W. Moore, Stillwater	First Wednesday
Pontotoc-Murray.....	W. T. Gill, Ada	Edward D. Greenberger, McAlester	1st and 3rd Wed.
Pottawatomie.....	Jack W. Baxter, Shawnee	Ollie McBride, Ada	Third Wednesday
Rogers.....	P. S. Anderson, Claremore	F. C. Gallaher, Shawnee	
Seminole.....	Claude Chambers, Seminole	M. E. Gordon, Claremore	Third Wednesday
Stephens.....	Fred Patterson, Duncan	Mack I. Shanholtz, Wewoka	Third Wednesday
Texas.....		W. R. Cheatwood, Duncan	
Tillman.....	G. A. Tallant, Frederick	E. L. Buford, Guymon	Second and Fourth Monday
Tulsa.....	Victor K. Allen, Tulsa Medical Arts Bldg.	O. G. Bacon, Frederick	
Washington Nowata.....	L. B. Word, Bartlesville	John G. Matt, Tulsa	
Washita.....	A. H. Bungardt, Cordell	Mr. Jack Spears, Exec. Secty.	Second Wednesday
Woods.....	R. A. Whiteneck, Waynoka	C. L. Johnson, Jr., Bartlesville	Last Tuesday
		Aubrey E. Stowers, Sentinel	Odd Months
		W. F. LaFon, Alva	

COUNCILORS AND VICE-COUNCILORS

COUNCILORS AND VICE-COUNCILORS

District No. 1: Alfalfa, Beaver, Cimarron, Dewey, Ellis, Harper, Texas, Woods, Woodward—Daniel B. Ensor, M.D., Hopeton (C) 1950; O. C. Newman, M.D., Shattuck (V-C) 1950.

District No. 2: Beckham, Custer, Greer, Harmon, Jackson, Kiowa, Roger Mills, Tillman, Washita—L. G. Livingston, M.D., Cordell (C) 1951; O. C. Standifer, M.D., Elk City (V-C) 1951.

District No. 3: Garfield, Grant, Kay, Noble, Pawnee, Payne, Major—Bruce Hinson, M.D., Enid (C) 1949; R. W. Choice, M.D., Wakita (V-C) 1949.

District No. 4: Blaine, Canadian, Cleveland, Kingfisher, Logan, Oklahoma—Carroll Pounders, M.D., Oklahoma City (C) 1950; Joe Phelps, M.D., El Reno (V-C) 1950.

District No. 5: Caddo, Carter, Comanche, Cotton, Grady, Jefferson, Love, Stephens—J. Hobson Veazey, M.D., Ardmore (C) 1951; O. J. Hagg, M.D., Waurika (V-C) 1951.

District No. 6: Creek, Nowata, Osage, Rogers, Tulsa, Washington—Ralph McGill, M.D., Tulsa (C) 1949; P. S. Anderson, M.D., Claremore (V-C) 1951.

District No. 7: Garvin, Hughes, Lincoln, McClain, Murray, Okfuskee, Pontotoc, Pottawatomie, Seminole—Clinton Gallaher, M.D., Shawnee (C) 1950; Ned Burleson, M.D., Prague (V-C) 1950.

District No. 8: Adair, Cherokee, Craig, Delaware, Mayes, Muskogee, Okmulgee, Ottawa, Sequoyah, Wagoner—Shade Neely, M.D., Muskogee (C) 1951; W. J. Sayles, M.D., Miami (V-C) 1951.

District No. 9: Haskell, Latimer, LeFlore, McIntosh, Pittsburg—Earl Woodson, M.D., Poteau (C) 1949; E. H. Shuller, M.D., McAlester (V-C) 1949.

District No. 10: Atoka, Bryan, Choctaw, Coal, Johnston, Marshall, McCurtain, Pushmataha—W. K. Haynie, M.D., Durant (C) 1950; W. W. Cotton, M.D., Atoka (V-C) 1950.

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Old Way...

CURING RICKETS in the CLEFT of an ASH TREE

FOR many centuries,—and apparently down to the present time, even in this country—ricketic children have been passed through a cleft ash tree to cure them of their rickets, and thenceforth a sympathetic relationship was supposed to exist between them and the tree.

Frazer* states that the ordinary mode of effecting the cure is to split a young ash sapling longitudinally for a few feet and pass the child, naked, either three times or three times three through the fissure at sunrise. In the West of England, it is said the passage must be "against the sun." As soon as the ceremony is performed, the tree is bound tightly up and the fissure plastered over with mud or clay. The belief is that just as the cleft in the tree will be healed, so the child's body will be healed, but that if the rift in the tree remains open, the deformity in the child will remain, too, and if the tree were to die, the death of the child would surely follow.

*Frazer, J. G.: The Golden Bough, vol. 1, New York, Macmillan & Co., 1928



It is ironical that the practice of attempting to cure rickets by holding the child in the cleft of an ash tree was associated with the rising of the sun, the light of which we now know is in itself one of Nature's specifics.

New Way...

Preventing and Curing Rickets with OLEUM PERCOMORPHUM

NOWADAYS, the physician has at his command, Mead's Oleum Percomorphum, a Council-Accepted vitamin D product which actually prevents and cures rickets, when given in proper dosage.

Like other specifics for other diseases, larger dosage may be required for extreme cases. It is safe to say that when used in the indicated dosage, Mead's Oleum Percomorphum is a specific in almost all cases of rickets, regardless of

degree and duration. Mead's Oleum Percomorphum because of its high vitamins A and D content is also useful in deficiency conditions such as tetany, osteomalacia and xerophthalmia.

* * *

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Oleum Percomorphum With Other Fish-Liver Oils and Viosterol. Contains 60,000 vitamin A units and 8,500 vitamin D units per gram and is supplied in 10 c.c. and 50 c.c. bottles; and in bottles containing 50 and 250 capsules.

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(a naturally-occurring estrogen)

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Firmly rooted in endocrine research, THEELIN has had a strong sound growth *for two decades*. This pioneer estrogen has been successfully employed in *millions* of doses. Thorough appraisal of THEELIN is presented in its bibliography, which now consists of over *400 references in scientific publications*—impressive evidence that THEELIN produces specific effects in relieving symptoms and sequelae of both the natural and the artificial menopause. Being a pure crystalline substance, with potency determined by weight, THEELIN is 100% active estrogen.

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SHOULD VITAMIN D BE GIVEN ONLY TO INFANTS?

VITAMIN D has been so successful in preventing rickets during infancy that there has been little emphasis on continuing its use after the second year.

But now a careful histologic study has been made which reveals a startlingly high incidence of rickets in children 2 to 14 years old. Follis, Jackson, Eliot, and Park* report that postmortem examination of 230 children of this age group showed the total prevalence of rickets to be 46.5%.

Rachitic changes were present as late as the fourteenth year, and the incidence was higher among children dying from acute disease than in those dying of chronic disease.

The authors conclude, "We doubt if slight degrees of rickets, such as we found in many of our children, interfere with health and development, but our studies as a whole afford reason to prolong administration of vitamin D to the age limit of our study, the fourteenth year, and especially indicate the necessity to suspect and to take the necessary measures to guard against rickets in sick children."

*R. H. Follis, D. Jackson, M. M. Eliot, and E. A. Park: Prevalence of rickets in children between two and fourteen years of age, *Am. J. Dis. Child.* 66:1-11, July 1943.

MEAD'S Oleum Percomorphum With Other Fish-Liver Oils and Viosterol is a potent source of vitamins A and D, which is well taken by older children because it can be given in small dosage or capsule form. This ease of administration favors continued year-round use, including periods of illness.

MEAD'S Oleum Percomorphum furnishes 60,000 vitamin A units and 8,500 vitamin D units per gram. Supplied in 10- and 50-cc. bottles. 83-mg. capsules now packed in bottles of 50 and 250. Ethically marketed.

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